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AN ESSAY ON MEDALS.

VOLUME THE FIRST.

*Wood and Innes, Printers,
Poppin's Court, Fleet-Street.*

AN
ESSAY
ON
MEDALS:
OR,
AN INTRODUCTION TO THE KNOWLEDGE OF
ANCIENT AND MODERN
COINS AND MEDALS;
ESPECIALLY THOSE OF
GREECE, ROME, AND BRITAIN.
BY
JOHN PINKERTON.

THE THIRD EDITION, WITH CORRECTIONS AND ADDITIONS.

IN TWO VOLUMES.
Vol. I.



LONDON:

PRINTED FOR T. CADELL AND W. DAVIES, STRAND; AND
LONGMAN, HURST, REES, AND ORME,
PATERNOSTER ROW.

1804.

P R E F A C E.

As soon as the study of medals, attending the other arts and sciences upon their revival in Europe, became in any degree prevalent, books aiming, like this, to contain general principles of that branch of knowledge likewise appeared. In Italy, where collections of ancient coins were first formed, it was natural that works of this kind should arise. Accordingly, in 1548*, Enea Vico published his Discourses on the Medals of the Ancients; a treatise of very considerable intelligence for that period. He therein treats of the me-

* Others say 1555: they had not seen the first edition of the Giolito. Vinegia, 1548, 4to.

tals employed in ancient coinage; of portraits to be found on coins; of the types on their reverses; of their legends; of medallions; of false medals, and rules for discerning them; dates of history; forms of edifices; names of magistrates, &c. His example was imitated in France by Antoine le Pois, who in 1579 gave his Discourse on the Coins and Seals of the Ancients; of which the dry and verbose manner is compensated by the most exquisite plates which perhaps ever attended a medallic work.

Though these productions had merit, yet they had a confused method, and pedantic formality of erudition. These faults became the more striking as science advanced; and pedantry, of consequence, began to disappear; for the latter is only the school-master of the former, and as science attains to maturity, their acquaintance ceases of course. When a man is in the rudiments of any knowledge, how full he is of it! how importantly he talks of it!

but, as he advances, it becomes familiar, and he wears it easily about him. In like manner, countries have their pedantry, as well as individuals; it being the necessary attendant of the introduction of science.

A small work therefore, which should display brief and easy instructions for the intelligence of coins, being still very much wanted, in 1665 Charles Patin, son of the celebrated Guy Patin, physician to the French king, and a very skilful medallist, published his History of Medals, or Introduction to that Science. This treatise, of which the last edition, 1695, is, in my opinion, much superior to the work of Jobert, next to be mentioned, ran through many editions, and was translated into all the languages of Europe.

Notwithstanding the high merit of this work, in 1692 Pere Jobert presented to the public his *Science des Medailles*. It is proper to observe, that the first edition of Jobert is the

best of those published by himself; for that of 1715, which he published in two volumes, is only swelled with impertinence, and the crude reveries of Pere Hardouin, whom the author wished to flatter. The edition of 1739 is doubtless the very best; but this we owe to the editor*, and not to the author; and even of this edition the second volume is a mere farrago of useless lumber.

In the very year that Jobert published his book, one, something similar, first appeared in the English language†. Its title is, “ The

* M. le Baron Bimard de la Bastie; the *Bimardus*, *Baro Bimardus*, and *Bimardus de la Bastie*, of Frælich’s *Notitia*.

Mangeart’s *Introduction a la Science des Medailles*, &c. Paris, 1763, *fol.* is a dry compilation concerning antiquities found on medals; and the author shows no knowledge of the medals themselves. It is a kind of supplement to Montfaucon’s *Antiquities*.

† There is a Latin bauble, *De Nummis*, ascribed to our great Selden, of which he is quite innocent. It was written by Alexander Sardo, of Ferrara, and published at Mentz,

“ Greek and Roman History illustrated by
“ Coins and Medals, representing their Reli-
“ gions, Rites, &c. &c. By O. W. [Obadiah
Walker.] “ London, 1692.” 12mo. The
work answers to the title in one respect; that,
of 360 pages, not 60 are medallic; the rest are
all made up of Roman antiquities and his-
tory: but how it illustrates Greek history can-
not be discovered. Its plan is so very con-
fused and bad, and the whole work so feeble,
that it is no wonder that it never had any suc-
cess. In 1695, a translation of Jobert’s work
appeared, intituled, “ The Knowledge of Me-
dals,” which is ascribed to Walker.

The “ Numismata, or Discourse of Medals,
“ ancient and modern,” by Mr. Evelyn, was
printed in 1697. The size is folio, and the

1575, 4to, though re-published at London, about 1676, by
some artful editor, under the name of *Seldenus de Nummis*.
Labbe’s *Bibliotheca Nummaria* is annexed to it, and they are
both of a piece.

plan and writing are likewise in folio. None of his observations are new, but all tacitly taken from Vico, Le Pois, Patin, and Jobert. The plates of English medals are of little use, now that those of Snelling have appeared. Even they would have been better understood, had he not added explanations. There is, in the British Museum, a copy of this work, corrected by the author, with an original letter prefixed, complaining that the printer had utterly mangled and spoiled his work, so that it is necessary to give corrections. The corrections are for the worse.

In 1720 Nicolao Haym, an Italian musician, published at London his *Tesoro Britannico*, or British Treasury, in Italian and English; in which he proposed to engrave and describe, in about twelve quarto volumes, all the coins, statues, gems, &c. to be found in cabinets in England, and not before made public. He has accordingly given two volumes of Greek and Roman coins, with *his* explanations. But what

explanations! If but a letter appears on a coin, he can ascertain to what name that letter belongs: if but a nose, he will find a face to it: if the coin is quite bare, to divine its ancient forms costs him not a thought. Khell, a German medallist of some credit, has even lately re-published Haym's strange mass in Latin, with additions. But had he inspected the original medals, or known the character which that work bears here, where only it can be duly estimated, or indeed been possessed of any judgment, he would not have incurred the imputation of trying to perpetuate the gross errors of that lame production. As Haym pretends to mark the rarity, &c. of many of the coins he produces, his work was entitled to notice here.

Did not my design in this preface induce me to enumerate every English work, in particular, which has appeared of this kind, I should pass in silence that called "An Introduction to the Knowledge of Medals, by the late Reverend David Jennings, D. D." printed by Basker-

ville, 1764: 12mo. But this being the only other attempt in the language, it is necessary to mention it in few words. It consists only of about 60 pages, most of which are occupied with Jewish shekels and divinity, *as in duty bound to pray*. The only apology which can be made for it is, that it was drawn up by the author, as would seem, without the most distant view of publication; but was sent *into the breathing world, not half made up*, by some officious friend. Its innumerable blunders*, and holy verbosity, stamp it the most childish work which ever appeared in any science whatever.

From this deduction the reader will perceive how much a treatise of this kind was wanted, in

* To instance a few, he tells us that all ancient coins were first cast in moulds, then stamped; that there were sometimes five mint-masters; that S. C. is on all medals; that an altar on a coin of Augustus is a gate; that *Votis XXX. mult. XXXX.* implies a wish that the emperor may live 30 years and 40 more. He seems to say that all the Roman emperors appear with diadems. He certainly had never seen a dozen coins; nor a single medallic writer of this century.

our language in particular; though indeed such a work has been universally known to be needed, and much wished for, during this whole century. How far the present may answer the intention, or expectation, the reader must judge; though if he does not condemn, it will not be owing to the want of previous instructions; for I am well aware that nothing is more provocative of criticism than any attempt of which the author criticises his predecessors. But as this is a work of instruction, it was absolutely necessary to point out the faults of others, that they might be avoided.

The less an author says at any time about his own productions the better; so it shall only be added, that, though this little Essay was begun as a mere amusement and relief from idleness, yet I soon found that infinite labour was required to answer my own expectations. As it is disagreeable to relinquish a design when entered upon, this toil has not been spared. Indeed the reader will hardly believe how much attention is required in a work of this kind, for every page

almost contains a number of minute facts, for each of which considerable information is necessary: insomuch that perhaps in two or three lines the fruit of much research into a dozen or two of authors is presented.

They who wish to proceed in this science may next peruse the most excellent and useful work of Frœlich*, and afterward such books of medals as they please, in chronological order as published, from Goltzius down to Pellerin and Combe. I scruple not to recommend Goltzius, though all his works have many coins not yet found in cabinets, his own being un-

* “ Notitia Elementaris Numismatum antiquorum illorum
“ quæ Urbium Liberarum, Regum et Principum, ac Per-
“ sonarum Illustrium, appellantur. Viennæ, Pragæ, et Ter-
“ gesti, 1758,” 4to. This work is, however, not without faults: the list of Greek cities of which we have coins is defective in about a third of the number; and the plan of splitting the series of kings of every realm into different epochs is execrable. A more minute fault is, his giving plated coins the title of *bracteati*, a name belonging to a very different kind, as the reader will see in Section XVIII. of this work. *Nummi lamella argentea obducti*, or *Nummi Pelliculati*, was the proper phrase for plated coins.

fortunately lost, because medals which he describes, and which were looked upon as fictitious, are yearly found really existent, and of undoubted antiquity. A French writer compares him to Pliny the natural historian, who was thought to deal much in falsehood, till Time drew his truth out of the well; so that, as knowledge advances, most of his wonders acquire gradual confirmation. Yet it is certain that he was often imposed upon; and his works must be used with great caution. His coins of the Roman Tyrants, for instance, are clearly false; for they bear *PREN.* and *COG.* on the exergue, which marks never occur on the real coins. For modern coins and medals, the authors who have treated those of each particular country must be consulted; the English, in particular, appear, in Snelling's Works and Folkes's Tables, to an advantage which will not be soon surpassed.

As the reader may, however, expect some directions for his medallic studies, I shall beg

leave to offer him a list of what authors have appeared to me the best, after a perusal of almost every work published in this line, from a duodecimo pamphlet to two volumes folio, and from the beginning of the 16th century to the present hour. Perhaps this estimate may be thought too severe, when the shortness of my list is considered; but I will venture to say, that in no science whatever have so many bad books, and so few good ones, been given as in this. At the same time, if the reader wishes to enlarge his studies, he may please his fancy: all that I shall do here is, to give him a short catalogue of the best medallic productions, and the best editions of them.

For the general science, may be recommended Vico's work, *Discorsi sopra le Medaglie de gli antichi*: best editions are, *Vinegia*, 1555, 4to, and *Parigi*, 1622, 4to; and Patin's *Histoire des Medailles, ou Introduction a la Connoissance de cette Science*: best edition is of Paris, 1695, 12mo.

The study of the Greek coins may be begun with Goltzius, *Historia Siciliae et Magnae Graeciae ex antiquis Numismatibus*, Antwerpiæ, 1644, folio. Recourse may then be had to Gessner's *Thesaurus Numismatum*, Tiguri, 1738, two volumes folio. This work contains all the Greek and Roman coins published by every preceding author, and consists entirely of copper-plates, with printed explanations of only the Greek kings, though the civic coins are likewise explained in copper-plates. The Roman medals, which compose the second volume, are not illustrated at all. It is a pity that many of the coins are not in exact order, in the beginning of the first volume, and that the author has been so ill advised as to give us many of the forged coins, though he always marks them as such; but, upon the whole, this is the best medallic work of general reference ever published*. The pro-

* The work of Gessner is rare, and, when met with, is very seldom complete. Such copies as have fallen in my way go no lower than Philip the son: later coins will be found in Banduri.

ductions of Pellerin, Paris, 1762, and following years, till 1778, ought next to be perused, making, with all the supplements, ten quarto volumes. These volumes chiefly contain coins never before published, and are justly held in high esteem. I believe it is to M. Pellerin that we are indebted for the first plates of medals, perfectly representing the originals in every flaw and irregularity of edge and impression, which is a most capital improvement, and makes the view of such plates almost equal to that of the coins themselves. Dr. Combe's publication of Dr. Hunter's coins of Greek cities, London, 1782, 4to, as it is the last, so it is the very best of the kind ever yet given. The plan of presenting the weight, metal, and size of every coin, in marginal columns, cannot be enough praised, as every use may be made of a description so arranged that can be drawn from the coins themselves.

For the Greek monarchic coins Gessner may be referred to, as the most ample assemblage;

and a few additional coins may be found in the authors mentioned in Section II. of this work, Frælich's *Notitia*, and Pellerin. We must regret that the medals of Greek princes in Dr. Hunter's cabinet are not published, as they form the largest and best collection of that kind in the world, being infinitely superior to that of the French king.

The Roman consular coins will be found in full detail in Gessner; and those who wish for descriptions may read Vaillant's *Nummi antiqui Familiarum Romanarum*, Amst. 1703, 2 volumes folio; or the *Thesaurus Morellianus*, Amst. 1734, 2 volumes folio, which is a later and a better work.

The imperial coins of Rome are likewise very amply displayed by Gessner; though along with him, for the rare coins, should be perused Vaillant's *Numismata Imperatorum Romanorum*, published by Baldini at Rome, 1743, 3 volumes 4to; and Kheil's *Numismata Impera-*

torum Romanorum, Vindobonæ, 1767, 4to, being a supplement to the Roman edition of Vaillant. Banduri's *Numismata Imp. Rom. a Trajano Decio usque ad Palaeologos* (that is, to the termination of the Byzantine empire), Lutetiæ, 1718, 2 volumes folio, should likewise be used for the Byzantine coins in particular, being superior to the work of Ducange on that subject. Occo's *Numismata Imp. Rom.* is a good book of general reference, being only a list of all coins in every reign, digested into the years in which they were apparently struck. Occo's own second edition is the best; the additions of Mezzabarba are of dubious faith*.

* An authentic work on the portraits of illustrious men of antiquity, drawn from coins, gems, busts, statues, &c. is much wanted. That of Ursinus is not to be depended on; he was the Haym of a former period, and, like him, is given to substitute his own fancies for truth. The portrait of Virgil, in particular, which we now find every where, and for which we are indebted to one of the dreams of Ursinus, is only that of a Muse. A gem without inscription, or attribute, was the foundation of this universal authority! See in Mariette's *Gems*, Vol II. fig. 15, Apollo and the muse of pastoral poetry with a pillar between them, surmounted by a

Of books on modern coins and medals, the first which ought to be perused by a British subject are those relating to his own country. He cannot begin better than with Mr. Clarke's "Connexion of the Roman, Saxon, and English Coins, London, 1767," 4to. A good work on British and Saxon coins, with prints, is much wanted; but as none now exists, let us pass to the English: and in the very first place may be recommended Mr. Lowndes's excellent "Report, containing an Essay for the Amendment of the Silver Coins," published by order of government at London in 1695, 8vo; a production, though short, yet full of the most valuable and authentic information. Then Snelling's Views of English Money, London, 1763, and following years, 4to, ought to be perused, and followed by Folkes's Tables of English Coin, London, 1763, 4to; correcting the errors of either work, by means of the

head like that facing the common Virgil. Canini's work, Amst. 1731, fol. is better, but far from perfect.

other. Ducarel's Letters on Anglo-gallic Coins are very commendable, and singularly interesting to every one concerned in the ancient glory of this country. English medals are published by Snelling, and in Vertue's account of Simon's works. On the Scottish coins the only books are those of Anderson and Snelling, neither of them perfect. The Irish are well displayed by Simon, in his Historical Essay on Irish Coin, Dublin, 1749, 4to, with the Supplement by another author, 1767, 4to.

With regard to other modern countries, the coins of the various states of Italy may be found in Argelati's Collection *De Monetis Italiae*, Mediol. 1750, *seqq.* 6 vols. 4to. Those of France are best studied in Le Blanc's *Traité Historique des Monnoies de France*, Paris, 1689, or Amsterdam, same year, both editions in 4to. The ancient coins of Spain will be found to much advantage in the work of Florez, called *Medallas de las Colonias, Municipios y Pueblos antiguos de Espana, con las de los reyes Godos*, 3 tom. 4to:

the two first were published in 1757, the last in 1773. On the more modern Spanish coins I know of no treatise to recommend. The papal coins are published by Floravantes, Rome, 1738, 4to. The papal medals were published at Rome in 1696, two volumes folio: the select ones by Venuti in a work of more credit, Rome 1744, 4to. The German coins, though many authors have written in the German language about them, are not given in any good work, written in a language of more general use. Those of Denmark may be found in the *Musaeum Regium* (Danicum) of Jacobæus, Hafniæ, 1712, folio; or, to far more advantage, in the plates engraven by order of the present king, who is a generous patron of the sciences. The Swedish coins are displayed in Brenner's *Thesaurus Nummorum Sueo-Gothorum*, Holmiæ, 1731, 4to. Bizot's *Histoire Medallique de la Hollande* gives the medals struck by the United Provinces, for few readers will have phlegm enough to read Van Loon's five folio volumes, of which a French translation was published at

the Hague in 1732. On the coins of the several eastern countries, and those of the smaller states in Europe, different treatises have been published; but, as they are little interesting, it were needless to enumerate them.

Such is the list of almost all the works, worth attention, which have been written on this science. Most of the others the reader will not peruse with impunity, as he will crowd his memory with many errors, which it will require much study for him to eradicate. Pamphlets upon single medals, and the like, are commonly written by the authors only to show that old women are not the only persons who can say a great deal upon nothing. These particularly swarm; and I will be bold to say that not one of them deserves perusal, even though the name of a first-rate medallic author stands at the head of it.

This preface cannot be dismissed without offering a remark upon the pedantry which, to

this day, so much prevails in this science. They who make a pursuit of it, ought to reflect that, though it is a most innocent pursuit, and such as never engaged the attention of a bad man, it is yet a far more laudable amusement. They ought, in consequence, not to make of it an article of faith, but to treat all the parts of it with coolness and candour, as matters of the merest indifference, and certainly of no necessity or importance. Instead of this, the conversation of some medallists is commonly vehement about trifles, and condemnatory of every opinion, of either living or dead authors, which accords not with their own. Like other pedants, they are fierce and stern: for there are many analogies between men and other animals, and none stronger than this, that they get fierce from being kept in the dark.

The French medallists treat the science with more politeness, though they carry the attachment to a height unknown to us; as may be judged from the very late example of

M. Pellerin, a man of great wealth, who was so fond of medals as to continue to write upon the subject after he was blind with age. This he did by means of an invention described in the last volume of his works. The French fashion is now beginning to be followed among us; and many of the present medallists are no less distinguished by their knowledge than by their modest and liberal communication of it, so that it is to be hoped that, in a very short time, the pedantic spirit which has so long infested this science will totally disappear.

ADVERTISEMENT

TO THE

SECOND EDITION.

IN order to render this treatise as complete, and generally useful, for knowledge of the subject, as possible, the author has been induced to make great additions. Besides many smaller insertions through the whole, the chief improvements now added, are as follow*.

1. A full account of the Greek and Roman money, illustrated by perpetual reference to the original authors, and to the coins them-

* This edition would have appeared last winter, had not a fire, Jan. 1788, consumed the printer's house, and the impression; but fortunately a copy was saved.

selves. Several errors of theoretic writers on this subject have been removed, by practical illustration from the coins—the surest evidence. It is hoped this addition, the most large and important of all, will be found useful to every reader of the classics; and that the student of medals will not be displeased to see new lights thrown upon them, considered in their genuine view of ancient money; especially as this province, though radically essential to the real knowledge of ancient medals, has been hitherto totally neglected by medallic writers. This part of the subject, dry in itself, yet interesting from its importance to classical learning, the author has attempted to enliven by a clear method, and by reference to the coins, several of which are engraven in the Plates at the end of this volume.

2. The several classes of Greek and Roman medals, as divided into Gold; Silver; First, Second, and Third Brass; are more fully specified by examples, and observations on remark-

able coins, than has hitherto been attempted in a work of this nature. As the real knowledge of coins can only be had in seeing cabinets, these examples, and observations, will be found convenient, as they may serve to direct attention to the leading features in cabinets; and give previous ideas to be carried into, and confirmed by, the perusal of the medals themselves.

These two additions concern the First Volume: the following two are to be found in the Last.

3. A general account is given of the coinage of every modern kingdom in Europe; nay of those in Asia, Africa, and America; but these last are restricted to brief hints. As this work differs from other Introductions to this science, by embracing modern coins and medals, as well as ancient, the enlargement of this part became proper; the more especially, as the coinage of Great Britain is perhaps as interesting

a part as any to the reader; and it is impossible to form just ideas respecting it, without knowing something concerning the origin, progress, and nature, of other European coinage. Not to mention the curiosity of this part of the subject in itself; and its necessity in a general introduction to the knowledge of coins and medals, modern as well as ancient.

4. In the Appendix, the most important addition consists in the Estimates of Rarity of Greek Coins of Cities and of Kings. This part being new, and unattempted on so large a scale, it is hoped it will be found as useful, as it was difficult to adjust. Some faults there must be in it, as in every first attempt; but the connoisseur is entreated to pardon and correct them. An account of the rarity of Roman coins was thought impossible, till Savot gave his. Other writers followed, added his omissions, and corrected his mistakes, till the rarity of the whole Roman coins became accurately stated. Such may be the case here:

and may the defects of these estimates be soon supplied, and their errors amended! for the author should with pleasure sacrifice literary reputation to the progress of science.

This edition is also illustrated with prints of coins, engraven exactly of the form and size of the originals; forming specimens of all the chief sorts: and in which no labour has been spared to procure the utmost accuracy. Many of these coins are not only valuable as specimens, but as never having been published before; insomuch that more unpublished coins appear in these plates, than in many quarto volumes; whereas in former productions of this sort, the coins have been taken from common books. A complete Index, so necessary in a work of this kind, is likewise added.

The preface to the first edition stated that many mistakes must have escaped in a work of this nature, consisting of minute facts, and va-

rious information. Many errors have accordingly been, from time to time, discovered and corrected. Two of our first medallists, and a third gentleman very considerably skilled in the subject, have kindly condescended to go through every page of the first edition with the author; and to point out every error they could observe. Most of the latest medallic works have been repeatedly perused; and their more important and judicious remarks transplanted into this work: using a metaphor derived from the subject, the metal has been used, the dross left behind. With such able assistance, the author must pay a very high compliment to his own stupidity; if he did not hope that this work may be found little inferior to any of the former on this subject.

Indeed, since Jobert published his book called *La Science des Medailles*, near a century ago, no treatise of this kind, worth notice, has appeared, except Monaldini's *Istituzione Antiquario-Numismatica*, printed at Rome 1772, 8vo,

which is certainly the best, and every way far superior to Jobert's work. The *Science des Médailles* has been long gradually sinking in estimation, in spite of the ill-bestowed labours of the Baron de la Bastie on the last edition, Paris, 1739, 2 vols. 12mo*. So much is this science improved since Jobert wrote, that his book has become like a superannuated Calendar; and can only serve to mislead the reader. And, of all books in the world, De la Bastie's edition of Jobert is the worst calculated for a beginner, or for the public at large; as almost the whole notes of the Baron are employed in confuting the text of Jobert, and in exposing its errors: so that what the reader thinks he has learned in the text, he finds, with perpetual disgust, that he must unlearn in the notes. Had the Baron given quite a new work, it would have been valuable; but his choice of com-

* This book, like many others, only brings a high price from the fewness of the copies thrown off, and the loss there would be in reprinting it.

menting on an old one, only shows, among many examples, that learning is one thing, and judgement another. It is clear from Jobert's work that he had little learning, and still less knowledge of coins. His extreme flattery of the several medallic writers of France, his contemporaries, particularly the insane father Hardouin, whose dreams he deals much in, made them conspire to give his work a temporary reputation; which, not being founded on merit, has subsided and fallen. Many of his errors are so extremely gross, that the merest novice could hardly have stumbled on them. He tells us gravely, *Inst.* 9, that a bee on coins is the sure mark of a colony: whereas it never has that meaning, and it is even doubtful if it appears on a single colonial coin at all. In the same section he says a sow on coins shows Judæa preserved by Vespasian; whereas it occurs on consular coins, struck before the Romans knew that Judæa existed; and on the imperial is the sow with young, found by Eneas, the supposed father of the Romans; as on the consular it ge-

nerally expresses the ancient form of making treaties described by Livy. Of the coins of his own country he is so ignorant, as to speak of justifying the whole series of French kings from Clovis, by means of their coins! He speaks of genuine leaden coins of Tigranes! According to him, no colony struck coins after Gallienus; whereas many of Antioch occur of Claudius Gothicus. Monaldini, p. 296, confutes, as has De la Bastie, the errors of Jobert concerning imaginary epochs on imperial coins. Jobert, *Inst.* 2, is an advocate for the existence of Corinthian brass in coins; though that error had been detected by Savot long before. He most facetiously supposes, *Inst.* 5, that INDVT. III. upon a coin of Germanicus, implies the year of the Indiction, because the Indictions occur on coins of Mauricius! In Roman history he is so skilled as, *Inst.* 6, to give us this information: "The miracle that happened at Tarragon, after the death of Gordian, when a palm was seen to spring out of the altar of Augustus, upon which occasion they coined a

medal with the representation of the wonder, and these four letters, C. V. T. T. Colonia Victrix Togata Tarraco; and upon which the emperor Philip made a very pleasant piece of raillery.” Any school-boy might have informed Jobert that this matter happened at Tarraco, in the reign of Augustus; and that Augustus himself made the raillery, which was, *Ay, it appears how often they sacrifice*: the merest novice in medals could have taught him that not a single coin was struck by Tarraco, or any other colony in Spain, after the time of Caligula. But I need not dwell longer on the innumerable errors of this work; many of which are exposed by De la Bastie in his notes; though he passes others with the tenderness of a commentator. These remarks are necessary in a book of this kind, that the reader may not be misled by erroneous productions: and that he may not blame the author for omitting information that is really false; for which reason they are chiefly given, *non ut arguerem sed ne arguerer*. Nor can they be closed, without observing that

Jobert's plates are extremely ill-chosen; consisting of double-headed satyric baubles on papists and protestants, and other specimens of like value, most inaccurately drawn and engraven. That they are all not in *fac simile*, but reduced to circles of one size, is the fault of the times, and not of Jobert; yet nothing can be more unsatisfactory, nay embarrassing, to a beginner, as he can only form ideas, which he must find totally false, when he sees the coins themselves.

Monaldini's *Instituzione Antiquario Numismatica*, which the author did not chance to see before the first edition of this Essay appeared, is every way much superior to the *Science des Medailles*. Every article, worth notice in this last, may be found in the former, more accurately stated; and the information of De la Bastie is given at once, without perplexing the reader with the errors of Jobert's text. But beside this advantage, Monaldini's work is fraught with variety of learning; and many of the latest discoveries in medallic science, to which both Jo-

bert and De la Bastie were strangers. Yet, on perusal, it is believed few of his notices will be found important that are not in these volumes. It is only to be wished that Monaldini had been more methodical; and had thrown his numerous tables into an appendix, instead of embarrassing the text of his book with them. Monaldini's plates are also very poor, like other modern Italian plates; and his work is too abruptly deep in the subject for a beginner. Indeed, to catch the ideas which lead from ignorance to knowledge, is a difficult, though not a glorious, province; and it is believed that this little Essay will prove as convenient a boat to carry the reader from the shore of ignorance in this subject, to the ship of science, as has yet been fitted out. If found so, the author's aim is satisfied.

This advertisement must not be closed, without mentioning that, among the gentlemen to whom the author has been most obliged in preparing this new edition, Dr. COMBE and the Reverend Mr. SOUTHGATE deserve his

best acknowledgements. The former, among other favours, most liberally, and with the true spirit of science, permitted the author to have any coins he pleased copied from Dr. Hunter's capital cabinet, chiefly collected under his direction; and of which he retains the care, till, according to Dr. Hunter's will, it pass to the University of Glasgow. Of this generous indulgence the author availed himself, in adding a double value to his plates; which not only afford specimens of most sorts of coins, in exact fac-simile of size as of type and letters, but many of them unpublished before, and rare to excess. The latter eminent medallist, though occupied in a work upon the Saxon coins, yet allowed several unpublished to be copied from his cabinet for this treatise; and assisted the author with many valuable hints concerning both ancient and modern coins and medals, for the erudition, and the practical knowledge of which, he is well known to yield to very few.

It shall only be added, that the author has

now completely filled the plan proposed for this Essay; and that whatever edition may be after published, though at a distance of twenty or thirty years, it can only afford slight corrections, but never exceed this in size. Desire of brevity made the first edition defective in information; but the work has now attained the extent, which the examples of Jobert and Monaldini, joined with full examination of the subject, evince to be necessary for a proper introduction to this science.

ADVERTISEMENT

TO

THIS EDITION.

BY the assistance of several friends, well versed in the subject, the author has been enabled to lend some improvements to this edition. His particular thanks are due to Mr. Harwood for the enlargement of the list of the reverses on the Roman coins given in the Appendix.

Some additional remarks, which did not arrive in time for the impression, may here be mentioned.

Vol. I. p. xviii. Spanheim, in his second edition, seems to have preceded Pellerin in this improvement.

P. 10. It appears from the life of Lord Burleigh, in Peck's *Desiderata*, that he had formed a small collection of Roman coins, esteemed of great value at the time.

P. 13. A friend has furnished the following list of the chief collectors, 1808.—Lord Aberdeen, Lord Northwick, Mr. Paine Knight, Mr. Edward Knight, Mr. Bindley, Mr. Neve, Mr. Douce, Mr. Harwood, Mr. Edgar, Mr. Trattle, Captain Stanton, Captain Durant, Reverend Mr. Martin, Mr. Bentham, Mr. Surtees, Mr. Heber, Mr. Henderson.

Vol. I. p. 57. It would appear that Isidorus was the first who fell into the mistake concerning coins of Corinthian brass.

P. 70. Rothelin's collection of the coins of Probus is now in the hands of Mr. Douce, and augmented to nearly three thousand.

P. 318. ΑΕΝΔ. ΕΚΑΤΟΥ, if not Α. ΕΝΔΕΚΑΤΟΥ, "the eleventh year."

P. 335. Though it is not impossible that there may be additional plates in some copies of Havercamp's publication of the coins belonging to Christina queen of Sweden, such variations not being uncommon in books full of plates, yet many copies have been in vain consulted for the beautiful Britannia of Claudius. But it may be found in the Arschot collection, published at Antwerp by Gevartius, 1654.

Vol. II. p. 34. A new work on the old Italian medals, struck at the time of the restoration of the art, is much wanted. Mr. Douce has a great many no-where explained; and Mr. Bindley's collection presents yet more numerous instances. In Italy they bring large prices. The collections here are those of the British Museum, Mr. Bindley, Mr. Heber, and Mr. Douce.

P. 319. There are certainly British coins prior to Julius Cæsar; but they cannot be

strictly appropriated, far less ascribed to particular monarchs: so that what is here said does not contradict, as some have imagined, the account of British coins given in the first volume.

There are some variations in the gold pennies of Henry III. of England.

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E R R A T A.

- Vol. I. page 205, line 2, *for* as, *real* though.
318, 3, *for* jocular, *read* jaculator.
319, 19, *for* thinner, *real* thicker.

AN ESSAY ON MEDALS.

SECTION I.

Rise and Progress of the Study of Medals.

THE amusement arising from medals is so common and universal, that we meet with few people who have not formed a little collection of some kind or other. As no axiom is looked upon as more certain than that even the minutest principles of the human mind have been the same in all ages, we must be induced to suppose that the study of medals is almost as ancient as medals themselves. We find not, however, in ancient writers, the slightest hint of collections of this kind. But many small particulars of the manners and customs of the ancients are passed without notice by their writers. Indeed, in the days of Greece, a collection of such coins as then existed, must have

been regarded as no valuable acquisition, consisting only of those struck by the innumerable little states then using the Greek characters and language. This would give them an air of domestic coinage; and make them be regarded with an eye of little curiosity, however exquisite their impressions. Add to this the small intercourse between different provinces and countries during that period, and we shall not wonder that if a traveller or two collected a few hundred coins, yet none of their fellow-citizens thought such a minute anecdote worth committing to writing.

If we pass to the Romans, the only other people of antiquity in whose writings we can expect any information of this kind, we shall find that, almost as soon as any communication was opened between them and the Greeks, the future sovereigns of the world treated the Grecian art, displayed in the minutest, as well as in the largest works of that ingenious nation, with due distinction and applause. The Grecian coins were imitated by the Roman workmen, and preserved in the cabinets of their senators, among the choicest treasures. The first circumstance we learn from the Roman medals of that period; and the latter from Suetonius,

who tells us that Augustus used, on solemn occasions, to present his friends with medals of foreign states and princes, along with other the most valuable testimonies of his love*.

In a more advanced period of the Roman empire, we know that individuals must have formed serieses of Roman coins; for a complete series of silver was lately found in our island, containing all the emperors down to Carausius, inclusive†. Banduri, in his preface, quotes Ulpian, l. 27. D. *de auro et arg. leg.* to show that certain coins were specially preserved by the Romans. And it appears from their code *leg. 23 ff. de usufr.* that ancient gold and silver coins were used *pro gemmis*, ‘as gems;’ a distinction to which the Sicilian in particular were well entitled.

From the decline of the Roman empire great darkness envelopes most branches of science

* *Saturnalibus, et si quando alias libuisset, modo munera dividebat, vestem, et aurum, et argentum; modo nummos omnis notæ, etiam veteres regios ac peregrinos.* Sueton. in Aug. n. 75.

† Stukeley’s *Medallic History of Carausius*; an author whom facts alone can justify my quoting.

till the revival of literature in the end of the fifteenth century. Indeed, while the Christian dominion of Constantinople lasted, which was near twelve unhappy centuries, it may be said to have kept all the arts and sciences within its own boundary. The Arabs, and other eastern nations, had indeed their own arts and sciences. But Europe was in darkness, till the fall of Constantinople forced the Greeks once more to be the fathers of European science; which upon that event, as at the breaking of a talisman, appeared in its ancient glory.

During a glimmering twilight, which preceded this radiant morning, literature was a little cultivated in Italy. And so intimate and necessary a connexion has now the study of medals with that of ancient erudition, that, on the earliest appearance of a revival of the latter, the former was also disclosed.

For we find that Petrarca, one of the very first men in Europe, who in modern times aspired to the celebrity of learning and of genius, was likewise the first to institute an example of the science of medals. This eminent writer being desired by the emperor Charles IV. to compose a book containing the lives of illustrious

men, and to place him in the list, with a noble pride answered, that he would comply with this desire whenever the emperor's future life and actions deserved it. Taking occasion from this, he sent that monarch a collection of gold and silver coins of celebrated men, as he tells us in his epistles. "Behold," says he to the emperor, "to what men you have succeeded! Behold whom you should imitate and admire! to whose very form and image you should compose your talents! The invaluable present I should have given to nobody but you: it was due to you alone. I can only know or describe the deeds of these great men. Your supreme office enables you to imitate them*."

In the next age Alphonso king of Arragon caused all the ancient coins, that could be discovered throughout the whole provinces of Italy, to be collected. The collection, however, must not have been very large, as it was placed in an

* Ecce, Cæsar, quibus successisti. Ecce quos imitari studeas, et mirari: ad quorum formulam et imaginem te componas: quos, præter te unum, nulli hominum daturus eram; tua me movit autoritas. Licet enim horum mores et nomina, horum ego res gestas norim, tuum est, non modum nosse, sed sequi. Tibi itaque debebantur. *lib. x. ep. 3.*

ivory cabinet, and always carried with him. The author of his life informs us, that Alphonso confessed himself excited to great actions by the presence, as it were, of so many illustrious men in their images.

Anthony, Cardinal of St. Mark, nephew of Eugene IV., who ascended the pontifical chair in 1431, had a vast collection. Soon after this, Cosmo de Medici began the grand museum of the family of the Medici at Florence; as the most ancient, so the most noble, in the universe. Among a profusion of other monuments of ancient art, coins and medals were not neglected. About the same period Matthias Corvinus, king of Hungary, formed a noble collection of coins, along with ancient manuscripts and other valuable relics of antiquity*.

Hitherto, however, no writer had ever thought of examining the subject of ancient medals. I take the celebrated Agnolo Poliziano, more known by the Latin appellation of Angelus

* For some of these instances the author is indebted to the preface of the last edition of *La Science des Medailles*, Paris, 1739, 2 vols. 12mo.

Politianns, to be the very first who even adduced them as vouchers of ancient orthography and customs. In his *Miscellanea**, written about 1490, he cites different coins of the Medicæan collection.

Maximilian I. emperor of Germany, having formed a cabinet of medals, Joannes Huttichius was enabled, by its means, to publish a book of the lives of the emperors, enriched with their portraits, delineated from ancient coins. This book, which is thought to be the first† of the kind, was printed in 1525, reprinted in 1534, and in 1537 a third edition appeared, with the addition of forty-two consular medals engraved on wood. Prior to this, however, and about 1512, Guillaume Budé, a French writer, had written his treatise *De Asse*, though it was not printed till many years afterward.

M. Grollier, treasurer of the armies of France

* Cap. 19. 58. &c. Basil. 1522. 12mo.

† Labbe, however, in his *Bibliotheca Nummaria*, mentions a work, called *Illustrium Imagines*, by one Andreas Fulvius, printed in 1517, in which, as would appear, most of the portraits are from medals.

in Italy during part of the sixteenth century, had a great collection of coins in all metals. De Thou tells us, in his History of his own Times, that after the death of Grollier, his brass medals were carried from Paris into Provence, and were about to be sent to Italy, when the king of France, being informed of this transaction, gave orders that they should be stopped, and bought them at a high price for his own cabinet of antiquities. Beside the medals of brass mentioned by De Thou, M. Grollier had an assortment of gold and silver. The cabinet, containing them, fell, two centuries afterward, into the hands of M. L'Abbé de Rothelin; and was known to have been that of Grollier from some slips of paper on which was his usual inscription for his books, "*Joannis Grollierii et amicorum.*"

Guillaume du Choul was the cotemporary of Grollier, and likewise a man of distinction and fortune. He had a good collection of medals, and published many in his Treatise on the Religion of the Ancient Romans, printed at Lyons in 1557.

The letters of Erasmus show that the study of medals was begun, in the Low Countries,

about the beginning of the sixteenth century. About the middle of that century, Hubertus Goltzius, a printer and engraver, travelled over a great part of Europe in search of coins and medals, for works, relating to them, which he intended to publish. In the prolegomena to his *Life of Julius Cæsar*, published as a specimen of larger works in consequence of these researches, he addresses an epistle to all the antiquaries who assisted him, or whose cabinets he visited. This epistle contains a list of collectors, and their places of residence; by which it appears that, in the middle of the sixteenth century, there were, in the Low Countries, 200 cabinets of medals; 175 in Germany; more than 380 in Italy; and about 200 in France. A prodigious number! but which now may be fairly quadrupled, as is imagined, for these countries, with the addition of 500 for our own, which we must regret that Goltzius did not visit. Yet we are not to imagine that all these collections were great, or celebrated; for of such there are not, even at present, above a dozen in Italy itself. Far the greater number were of that class called Caskets of medals, including from a hundred to a thousand, or two, in number.

It is not, however, to be thought that, while the other kingdoms of Europe were so rich in collections, this island neglected those treasures of antiquity, which the very soil often afforded to labourers. For in few countries in the world, if we except Italy, are more ancient coins found than in Britain; but at what period the study of them particularly commenced among the learned here, we are left in the dark. I suspect, however, that Camden was one of the first, if not the very first, of our writers, who produced medals in his works, and who must have had a small collection.

In the next, being the seventeenth century, Speed's Chronicle, published 1610, was illustrated with coins from sir Robert Cotton's cabinet. Henry prince of Wales bought the collection of Gorlæus, amounting, as Joseph Scaliger says, to 30,000 coins and medals, and left it to his brother Charles I. Archbishop Laud bought 5,500 coins for 600*l.*, and gave them to the Bodleian library. Thomas earl of Arundel and Surrey, earl marshall of England, well known by the Arundelian Tables, and other monuments of antiquity*, which he im-

* In the cellar of a house in Norfolk-street, in the Strand,

ported into this island from Greece and Italy, had, in his exuberant collection of antiquities, a rich cabinet of medals, gathered by Daniel Nisum. The dukes of Buckingham, and Hamilton; sir William Paston, sir Thomas Fanshaw of Ware Park, sir Thomas Hanmer, Ralph Sheldon, esq., Mr. Selden, and many more, are enumerated by Mr. Evelyn as having collections. The earl of Clarendon, the historian, must not be omitted: far less the unhappy hero of his tale, Charles I. That imprudent monarch, with an utter hatred for liberty, the parent of the fine arts, was yet singularly attached to these arts themselves; and, among other instances, had a very fine cabinet of medals*,

is a fine antique bath, formerly belonging to this earl of Arundel, whose house and gardens were adjacent. It is a pity that it is not more known, and taken care of.

* Hear Junius, librarian to Charles the First, speaking of the palace at St. James's: "*Quem locum, si vicinam pinacothecam, bibliothecæ celeberrimæ conjunctam; si numismata antiqua Græca, ac Romana; si statuas, et signa, ex ære et marmore, consideras, non immerito Thesaurum Antiquitatis, et Ταμείον instructissimum, nominare potes.*" In Notis ad Clem. Ep. ad Cor.—And this from Patin's *Familiæ Romanæ*: "*Carolus Primus, ille Magnæ Britannię rex, cæteros Europæ principes omnes hoc possessionum genere vincebat.*"

which, in the civil commotions, was dissipated and lost.

Oliver Cromwell had also a small collection; and that of Charles II. is mentioned by Vaillant, in the preface to his *Nummi in Colonia cusi*. Our later monarchs have little attended to this branch of magnificence; though his present majesty possesses a tolerable collection of ancient gold coins. But many noble cabinets have been formed in this country since Mr. Evelyn wrote. Haym, about 1720, mentions those of the duke of Devonshire, the earls of Pembroke* and Winchelsea, sir Hans Sloan, sir Andrew Fontaine, Mr. Sadler, Mr. Abdy, Mr Wren, Mr. Chichley, Mr. Kemp. At present the chief cabinets in Britain are those of the duke of Devonshire, the earl of Pembroke, earl Fitzwilliam, formerly the marquis of Rockingham's, the honourable Horace Walpole, the

* In the Catalogue of Mrs. Kennon's medals, sold by Langford, Feb. 1755, is this article. "15 Imperial large " and middle brass, cut in halves by the old earl of Pembroke " to make his own collection more scarce and valuable." Next lot is "15 Greek kings and others, all cut as above:" and the next "two Egyptian Othos, one brass and one silver, " cut as above " The whole sold for 2*l.* 14*s.* This is mentioned as an unexampled and detestable instance of caprice.

rev. Mr. Crachrode, the rev. Mr. Southgate, Mr. Townley, Mr. R. P. Knight, Mr. Edward Knight, Mr. Tyson, Mr. Barker, Mr. Brown, Mr. Bootle, Mr. Hodsul, Mr. Austen; with Mr. Ord's Egyptian, Mr. Douce's small brass, and Mr. Jackson's British. The Museum and the Universities have also collections; as have the Lawyers' Library, and one or two colleges in Scotland; not to enlarge on the private collections there, and in Ireland. But, above all, that of the late eminent physician, Dr. Hunter, deserves notice, as the greatest in Europe, if we only except that of the French king. It was not only formed at vast expense, but with great care and ability; many medals of foreign cabinets, that flowed into it, having been rejected by the severity of English skill. For in no country is the practical science at greater height than here: and the acute experience of our medallists detects forgeries which impose even on the skilful of most other countries. In the above enumeration many, perhaps more considerable than some mentioned, are omitted, because that the author had not access to them, or that they escape present recollection.

To enlarge much more on the history of this study would swell this little treatise to a most

unnecessary size. I shall content myself with observing that, from the middle of the last century, down to these times, almost every year has produced some new work, or new discovery, in this science.

SECTION II.

Utility of this Study.

IF we cast an eye over the whole circle of the productions of human genius, perhaps we shall perceive none of such grand importance and utility to mankind as History. Most of the other efforts of the mind only interest individuals as such; but history, when executed with philosophic candour and propriety, concerns and instructs whole empires, indeed the whole universe. By it statesmen and states are taught, from the example of former and other nations, and that of their own in preceding times, to propagate measures that contribute to the general welfare; and to guard against evils, which are often unforeseen, and, in consequence, not warded off, only because they are not known to have existed in ancient periods, nor the methods investigated which then prevented or mitigated them.

But the very basis of history is truth, without

which, the causes of human action, nay the actions themselves, are disguised, and the instruction, arising from the narration, totally lost, or converted into an empty chimæra. Now the sole evidence we can have of the veracity of a historian consists in such collateral documents as are palpable to all, and can admit of no falsification.

Such, in modern times, are public memoirs, instructions to ambassadors, letters of state, and the like vouchers; which every person allows to be irrefragable.

But as these proofs are subject to innumerable accidents, mutilation, and utter loss, their evidence cannot be presumed to extend to very distant ages.

Add to this that, as such vouchers most commonly remain in the country whose actions they import, they cannot be satisfactory to the world at large without a degree of faith, which, to the severe eye of philosophy, will appear too large.

Hence monuments of longer duration are required to evince the veracity of ancient history.

Such indeed are public buildings, statues, and inscriptions. But the evidence of these testimonies, though it extends to remote ages, does not extend to remote countries, if we except a very few instances of the two last articles.

The reader must have, ere now, recollected, from this deduction, that medals alone remain as the principal proof of historic truth, their evidence reaching at once to the most remote ages, and the most remote countries.

The vast utility of this study is therefore clear, because it serves as a support to the most important of all human sciences.

Perhaps the grounds of this reasoning may be looked upon as more abstract than existent; but a few examples will show their justice and rectitude. I should indeed expect the sensible reader's derision, if these examples were such as are sometimes adduced on this score. Some writers tell us, that, without the science of ancient coins, we should never have known that Antoninus had a son by Faustina, called Marcus Annius Valerius Antoninus, had not a Greek coin fortunately preserved the memory of this most stupendous event; that we should

never have known that a tyrant called Pacatianus existed, without such a circular record nor that Barbia Orbiana was the wife of Alexander Severus. Astonishing discoveries! and equally fitted to delight and instruct.

*Turpe est difficiles habere nugas;
Stultus et labor est ineptiarum.*

Leaving these impertinences of crude erudition, let us examine a little what has been actually performed toward an elucidation of different parts of ancient history, by means of the study of medals.

Vaillant, in his learned history of the kings of Syria, printed at Paris 1681, set the first important example of fixing the dates, and arranging the order of events in ancient historians, by means of these infallible vouchers. By them alone he was enabled to ascertain, in a very great degree, the chronology and progress of events of three of the most important kingdoms of the ancient world, namely, those of Egypt, of Syria, and of Parthia*.

* Many coins have been discovered of all these princes since Vaillant wrote, which further illustrate his provinces

Father Hardouin trod in the same path, but with his usual wrong-headed rashness, though indeed his Series of the Herodiades, or Kings of Judæa, successors to Herod, be the most unexceptionable of his works. Noris, in his learned treatise on the epochs of the Syromacedonian princes, and Bayer, in his history of Osrhoëne, followed the same plan, afterward honoured by the names of Frœlich*, Corsini†, and Cary‡.

But the study of the Greek coins, though it illustrates the chronology of reigns, yet never

of History. His History of the Arsacidæ of Parthia is his worst work: it is indeed a posthumous one; but he gives too much way to conjecture, as to the many princes on whose coins dates are wanting; which, in that series, are so numerous, that, at this day, only ten princes have been found whose medals fix their epoch.

* *Annales Regum et rerum Syriæ*. Vien. 1754; and Khevenhuller's *Regum veterum Numismata Anecdota*, aut *Perrara*. Vien. 1752, 4to, of which Frœlich was properly the author.

† *De Minnisari, aliorumque Armeniæ Regum, Nummis, &c.* 1744.

‡ *Histoire des Rois de Thrace, et du Bosphore Cimmérien, éclaircie par les Medailles*. Paris, 1752.

interprets that of events. This important addition is displayed, in all its vigour, in the Roman medals; in which most commonly, with the portrait of the prince, and date of his consulship, or of his tribunician power, we have a representation, or poetical symbol, of some grand event on the reverse.

The Greek medals, struck in the imperial ages, often mark the year of the prince's reign; the Roman, most commonly, the number of the emperor's consulship, or of his tribunician power. As the latter æra is sometimes mistaken, by antiquaries, for a mark equivalent to the year of the emperor's reign, we shall beg leave to offer a few remarks on that subject, as perhaps a more proper occasion may not occur.

When Julius Cæsar assumed the supreme power, he dared not to take the title of King, however ardently desirous of so ambitious a distinction. He was contented with that of Perpetual Dictator, synonymous with the former in effect, and (had he been rightly advised) of an import even more invidious. Certain it is, that it necessarily implied his intention never to quit, or even relax his autho-

city; whereas he ought, under the disguise of some supreme magistrature of annual election, to have lulled the people with a dream that they might terminate his power when they pleased; or that he would himself resign it when the necessities of state, which required his temporary elevation, had subsided. His power would by this art have been perpetual, without great envy; whereas his open assumption of an empty title submitted him to all the malevolence which the utter despair of his enemies could supply. He paid for the mistake with his life.

Augustus, who, with far less ability than his uncle, had yet that cunning which, in the commerce of life, commonly avails more to its possessor than great talents, which are indeed always incompatible with it, had the prudence to follow the proper plan. Every person, the least skilled in Roman history, knows that there was an office, entrusted at first to two plebeians, called the Tribuneship of the People. This was of annual election; and in fact, in any other hands but those of plebeians, must have been the supreme power in the state; for it belonged to that office to put an absolute negative upon every public measure whatever.

Augustus, as of senatorial rank, could not assume the title of Tribune of the People, but he invested himself with one quite equivalent, *Tribunicia Potestate*, that of being endued with tribunician power. This had the advantages formerly pointed out as accruing to an appearance of temporary supremacy. Toward the end of his reign, he often assumed his destined successor, Tiberius, as a colleague in the office, for it had been formerly allotted to two, but at first he enjoyed it alone, and in all public instruments and records numbered his tribunician power as an annual office. This, with his other artifice of laying down his understood supreme power, and resuming it from ten years to ten years, as at the desire of the senate, affianced his sovereignty to him in perfect security, to the natural end of his life.

This example was followed by his successors; so that the inscription on their coins is almost always *TRIBUNICIA POTESTATE*, among other titles, with the date annexed to it, as *TR. POT. VII.* &c. Yet, though this date far most generally implies the year of the emperor's reign, it however sometimes happens that the emperor was, by the special favour of a former prince, endued with this title before he came to the

throne, as being the chosen successor to that prince. Of this Tiberius, the fixed heir of Augustus; and Titus, the eldest son and natural heir of Vespasian, are instances,

From Tacitus* we learn that Augustus had the tribunician power, or reigned XXXVI years; and from inscriptions†, that the XXXth year of the tribunician power of Augustus was the IXth of that of Tiberius, to whom Augustus imparted this office all the other years of his reign; so that, Augustus dying in his XXXVIth tribuneship, Tiberius had enjoyed that power XVI times before he came to the throne. The Egyptian coins of Commodus date the year from his birth, he being the first *porphyrogenitus*, or emperor born while his father reigned. The years of Elagabalus are almost always reckoned from the death of Caracalla, whom he wished to pass for his father; leaving in silence the year Macrinus reigned as an usurped interspace. Beside the constant tribunician power, the

* Annal. lib. I.

† Apud Gruter. p. 295. It may not be improper to mention, that Commodus was tribune twice before he was emperor. See Obadiah Walker's Greek and Roman Hist. illustrated by coins and medals. London 1692, dedic.

emperors were often CONSULS; and when a coin bears their consulship, its date is easily seen.

Another grand art for securing the emperor's power was his bearing the office of PONTIFEX MAXIMUS, or High Priest. Julius assumed this office, along with the Perpetual Dictatorship; and though his successors prudently rejected the latter, they retained the former distinction. Superstition has always been found necessary to establish the authority of one man over many, originally his equals. In the Greek heroic times, king and priest were carefully united in one person: and when sovereigns arose in Denmark and Sweden, the same plan was followed, as appears from Snorro, and other writers. Nothing could lend more security to the person of the monarch, than an office of supreme sanctity; which also confirmed his power by all the terrors of superstition. Even the Christian system was after debased by a mock alliance with government, though it be clear from the whole New Testament that such an alliance is subversive of its genuine institution, and the greatest of all its corruptions. But the Roman Catholic clergy in the dark ages were the authors of 'No church, no king,' for

their own interest; while the Roman emperors only sought to strengthen their power by the dark awe of superstition. The title of *Portifex Maximus* was so important, that it was retained even by the Christian emperors, till the time of Gratian. Its influence in the state was indeed prodigious. Cicero observes that to this office were subject temples, altars, penates, gods, houses, wealth, and fortune of the people. That of *AUGUR* is also borne by many emperors; and its authority was such, that by the law of the Twelve Tables, no public business could be transacted without a declaration from the augur concerning its event. The *PROCONSULAR* power was also given to Augustus, and the other emperors. It conferred a direct authority over all the provinces, and implied the emperor to be chief proconsul or governor of each, and of all. Another special power assigned to the emperors, but not occurring on coins, was the *Jus Relationis Tertiae, Quartae, &c.* or right of making three or four motions in the senate on the same day, while the senators could only propose one.

This little disquisition was necessary, when treating of the utility of the Roman coins to the chronology of history; but, leaving it, I shall proceed to observe, that the series of me-

dals presents the very best suite of documents, of the Roman history in particular, that the art of man could have invented. Checking the flattery of some of them by the truth of history, they in their turn reciprocally evidence the falsehood or veracity of the historian. The history of Nerva and of Trajan is far fuller in medals, than in authors: for as Suetonius ends with Domitian; and the *Historiae Augustae Scriptores* begin with Hadrian; the reigns of Nerva and Trajan are almost unknown: and it is matter of surprise that no man of learning has attempted to supply this defect. Capitolinus, in his Life of Maximinus Junior, is embarrassed to know if Maximus and Pupienus were two emperors, or two names for the same. Had he happened on one of those coins which bear M. CL. PVPIENVS MAXIMVS AVG. he would have seen at once that Maximus was only another name for Pupienus.

Were I inclined to display erudition upon the subject of the various sources of utility arising from the study of ancient medals, I should perhaps run the risk of rivalling Spanheim, who has written two stupendous folio volumes on this very theme. But I shall content myself with offering a few remarks further upon this

division of my work, and even those after premising, that if any reader should be inclined to pronounce, that the principal utility of this study is the elegant and scientific amusement which it affords, I shall not be disposed to quarrel with him upon the score of difference in our opinions,

However, beside its service to history, the science of medals is certainly of considerable use to geography; to natural history; to the illustration of ancient writers; to architecture; and to the knowledge of a connoisseur, or that of ancient monuments, busts, statues, ceremonies, and the like.

Its utility to geography may be traced from the many Greek coins in which the situation of towns is assigned, as near some noted river, mountain, &c. Thus we have ΜΑΓΝΗΤΩΝ ΣΙΠΥΛΟΥ, of the inhabitants of Magnesia under mount Sipylus: ΕΦΕΣΙΩΝ, and the figure of a river, with ΚΑΙΣΤΡΟΣ in the exergue; which shows that Ephesus stood upon the river Cayster. ΑΛΕΞΑΝΔΡΕΩΝ Π. ΣΚΑΜΑΝΔΡΟΝ. Alexandria on Scamander, being a new city built by Alexander the Great; the reverse bears

ΑΠΟΛΛΩΝΟ. ΖΜΙΘΕΟΣ, or the famous Apollo Smintheus of Homer. Many similar instances may be given upon this head, but these may serve as a specimen.

The utility of the study of ancient medals to natural history arises chiefly from the coins struck on the celebration of the sæcular games, in which the figures of various animals are preserved. These sæcular medals very often indeed establish the point whether any animal was known to the ancients or not. On many of the Greek medals are the lively representations of several uncommon plants and animals; as in most of the medals of Cyrene is the celebrated plant called *sylphium*; and on those of Tyre the shell-fish from which the famous Tyrian purple was procured.

The brevity of my design obliges me to pass to the next division of utility, namely, that of the illustration of obscure passages in ancient writers to be drawn from coins. This article, if treated at length, might be found almost infinite; for such parts of authors of antiquity as have been explained, or may be explained, by the help of old coins, and are explainable by

that help only, are innumerable. Upon so vast a theme, therefore, I choose rather to say nothing than to say a little.

The uses to be drawn from this study to the art of the architect are undoubtedly many; for on medals are preserved the exact delineations of many of the most beautiful edifices of antiquity now not existing even in their ruins.

The knowledge of medals is no less useful; nay is absolutely necessary, to the connoisseur, because by it alone he is enabled to ascribe ancient busts and statues to their proper persons; with innumerable other minute points of information, without which he cannot aspire to that name, and which are only to be attained from an attention to this branch of science.

SECTION III.

*Connexion of the Study of Medals with the fine
Arts of Poetry, Painting, Sculpture, and
Architecture.*

THE connexion of this science with poetry has already been treated, at a considerable length, by one of the most excellent writers whom England has produced. Mr. Addison, in his Dialogues on the Usefulness of ancient Medals, has compared them with passages of the Latin poets at some length. His title-page mentions that the Greek poets fall likewise into his plan; but this must be a mistake of the printer, or a yet stranger mistake of his own, for there is not the slightest quotation from any Greek writer whatever from beginning to end. The preference indeed which Mr. Addison seems always inclined to give to the Latin poets, over those of Greece*, that is, to imitation over original

* Mr. Wise, in his *Nummi Bodleiani*, has a few instances

genius, cannot be too severely reprobated. The opinion of that justly celebrated writer has a vast influence upon public taste; and it is no wonder; for the *Spectator*, of which the principles of criticism are, in some instances, questionable, is nevertheless deservedly the most popular book ever written.

I shall not, however, attempt here to supply that grand defect in Mr. Addison's performance, having the fear of Greek, and the ladies, before my eyes: not to mention that such an attempt would swell this slight Essay to a size much beyond my intention. A few remarks, however, upon the general connexion between the study of medals and poetry I shall beg leave to offer.

It may justly be observed, that the knowledge of Greek medals is most necessary for a sculptor, and perhaps an architect; while that of the Roman is the more interesting to a poet, and a painter. This is owing to the former containing chiefly the head of some king, some god, or goddess, of exquisite relief and workmanship on the obverse; while the reverse seldom, in

of the connexion between Greek poetry and medals; but a special work on the subject would be interesting.

the early Greek coins, affords much fancy of symbol, and in the Imperial Greek coins is chiefly impressed with temples of their deities.

To a man of poetical imagination the Roman coins are most entertaining, from the fine personifications and symbols to be found on their reverses.—To instance in a few.

HAPPINESS has sometimes the caduceus or wand of Mercury which Cicero, 1 *Offic.* tells us was thought to procure every wish. She has, in a gold coin of Severus, heads of poppy, to express that our prime bliss lies in oblivion of misfortune.

HOPE is represented as a sprightly girl, walking quickly, and looking straight forward. With her left hand she holds up her garments, that they may not impede the rapidity of her pace; while, in her right hand, she holds forth the bud of a flower, an emblem infinitely more fine than the trite one of an anchor, which is the symbol of Patience, not of Hope. This personification, with some others, must have been very familiar to the ancients; for often in this, and a few more instances, no name, as SPES AVG. or the like, is inserted in the legend.

ABUNDANCE is imagined as a sedate matron, with a cornucopia in her hands, of which she scatters the fruits over the ground, and does not hold up her cornucopia, and keep its contents to herself, as many modern poets and painters make her do.

The Emperor Titus, having cause to import a great supply of corn, during a scarcity at Rome, that supply, or the ANNONA, is finely represented as a sedate lady, with a filled cornucopia in her left hand, which she holds upright, to indicate that she does not, however, mean to scatter it, as Abundance has a title to do, but to give it to Equity to deal out. This last particular is shown by her holding a little image of Equity, known by her scales, and *hasta pura*, or pointless spear, in her right hand, over a basket filled with wheat. Behind the ANNONA is the prow of a ship, decked with flowers, to imply that the corn was brought by sea (from Africa), and that the ships had had a prosperous voyage. The best poet in the world could not have given us a finer train of imagery; the best painter would be puzzled to express so much matter in so small a compass.

SECURITY stands leaning on a pillar, indi-

cative of her being free from all designs and pursuits; and the posture itself corresponds to her name. Horace, in describing the wise man, mentions his being *teres atque rotundus*, round and polished, against all the rubs of chance, an image seemingly derived from the column upon which this ideal lady reclines.

The emblems of PIETY, MODESTY, and the like, are equally apposite and poetical.

The happiness of the state is pictured by a ship sailing before a prosperous breeze: an image than which the superlative genius of Gray could find none more exquisite; and he has accordingly used it in his most capital production, *The Bard*, with due success.

The different countries of the then known world are also delineated with great poetical imagery. It affords patriotic satisfaction in particular to a Briton, to see his native island often represented, upon the earliest Imperial coins, sitting on a globe, with a symbol of military power, the *labarum*, in her hand, and the ocean rolling under her feet. An emblem almost prophetic of the vast power which her

dominion over the sea will always give her, provided she asserts her element of empire with due vigour and perseverance.

Coins also present us with Achaia, Africa, Alamannia, Alexandria, Arabia, Armenia, Asia, Bithynia, Cappadocia, Dacia, Dardania, Egypt, Gallia, Hispania, Italia, Judæa, Macedonia, Mauritania, Pamonia, Parthia, Phrygia, Sarmatia, Sicily, Scythia, Syria, and the rivers Danube, Nile, Rhine, Tiber. This personification of provinces, so interesting to the imagination, seems to have arisen from the figures of Provinces carried in triumphs; as the personification of our old poets sprung from the ideal persons actually represented in the Mysterial Plays.

Speaking of the poetical imagery of ancient coins, it must not be forgotten that there is one, and, to add to the wonder, a colonial one, and of rude execution, of Augustus and Agrippa, inscribed IMP. and DIVI F. which has a high claim to merit in this way. On the reverse the conquest of Egypt is represented by the apposite metaphor of the crocodile, an animal almost peculiar to that country, and at that period esteemed altogether so, which is chained to a

palm-tree, at once a native of the country and symbolic of victory.

But of the poetical invention, displayed in very many of the ancient coins, these few instances may suffice, considering, as has been said, that Mr. Addison has written so fully upon the subject of the connexion of this study with that of Latin poetry; and to enter upon that in other languages falls not into the brief plan of this little performance.

I think we are told that Rubens had a very fine collection of medals, and indeed, to a painter who dealt so much in allegorical subjects, they must have been of the greatest importance; for no where are the attributes of personification so finely preserved or delineated. A cabinet of medals may indeed be said to form the classical erudition of a painter.

It may be added, that as the reverses are so useful for knowledge of personification, symbols of countries and actions, and the like, so the portraits to be seen on old coins are no less important to a painter; the high merit of a great number of them, in every character, justly entitling them to be regarded as the best studies

in the world. Not to mention that, to a painter of the highest rank, an historic painter, the science of ancient medals is absolutely necessary, that he may delineate his personages with the features they really bore when in existence. This can only be attained in this way, or from statues and busts, any one of which will cost as much as hundreds of medals; and indeed a collection of such is only attainable by princes,

This naturally leads me to consider a little the advantages arising from this study to sculptors. Almost all the uses which connect the science of medals with painting, likewise render it subservient to the art of the sculptor; but the latter will, from the study of the Greek coins in particular, derive no small profit. The heads of the several deities represented on them, in the most exquisite alto-relievo, will recommend them to his attention in a particular manner.

The wonderful skill of the Greeks in sculpture has always been a subject of admiration to the world. Nations, in which a taste for the fine arts has made any progress, have viewed, with universal applause, the wonderful efforts of Grecian genius; the character and expression

of the faces, the contour, and perfect nature and symmetry of the whole figure; the strength, chastised with inimitable *morbidezza*, that, if not life itself, is almost superior.

Yet, from whatever cause that the Grecian coins sister productions of art, have never yet been regarded, so far as I know, with proper attention by men of taste. This can only be accounted for by supposing that the study of Greek medals has hitherto been looked upon as the province of the mere antiquary. But it may be asserted, that, to the man who admires medals solely as pieces of workmanship, those of Greece will afford the highest satisfaction. Considered in this view, and indeed in most others, they excel those of Rome, the best times of Rome, to a surprising degree. The perfect beauty and tenderness of the female portraits, and the strength and expression of the male, cannot be exceeded, in any shape, by the largest efforts of Grecian sculpture.

In every quality of art the Roman coins yield to the Greek alone. If any *æra* were to be assigned to the Roman, as more eminent for workmanship than another, that from Augustus to Hadrian, must have the preference. In the

days of Hadrian, in particular, the Roman mint seems to have been the very seat of art and genius; witness the vast number of exquisite personifications, engraven with equal workmanship, which swarm on the medals of that prince. Yet, from his time, down to Postumus, coins of admirable execution are to be found. Those of the Faustinas and Lucilla deserve particular mention. There is one, and not an uncommon one, of the latter in great brass, which yields to nothing of the kind. The reverse is a Venus, with the name around her. The portrait of the obverse seems to spring from the field of the coin. It looks, and breathes; nay, talks, if you trust your eyes.

Manca il parlar, di vivo altro non chiedi;
Ne manca questo ancor, s'agli occhi credi.

The connexion of the study of ancient coins with architecture consists in the views of many of the ancient edifices, which are found in perfect preservation on medals, and there only. The coins of Tarsus are extremely remarkable for a kind of perspective in the figures, as Frœlich observes. On others are found, triumphal arches, temples, fountains, aquaducts, amphitheatres, circi, hippodromes, palaces,

basilicas, columns and obelisks, baths, sea-ports, pharoses, and the like. These furnish much pleasure and instruction to the architect, and serve to form his taste to the ancient manner; that manner which unites perfect simplicity with sublimity and grace; that manner which every age admires in proportion as it has genius to imitate.

SECTION IV.

*The various Sources of Delight and Amusement
arising from it.*

THE principal and most common source of pleasure arising from the science of medals is their workmanship. The motives of delight which owe their origin to the other efforts of imitative art, will here likewise of course predominate. A philosophic inquiry into the prime causes of our pleasures arising from art, though it would make an admirable subject for a treatise, yet were in this place foreign and impertinent.

Not to enter then into that profound subject, this we know, that the most barbarous nations are more pleased with the rudest efforts of art than with the most admirable works of nature; and that, in proportion as the powers of the mind are large and various, such, likewise, are the pleasures which it receives from those su-

perative productions of art, which can only be the offspring of vast genius. It follows, that the creation of art alike pleases the most uninformed, and the most cultivated mind.

In that creation the skill of the engraver of medals certainly deserves an honourable place. The offspring of his labour, to the portableness and high finishing of miniature painting, adds the relief and expression of sculpture.

The chief and most common amusement, therefore, which attends this study, originates from the strength and spirit, from the finish and beauty, which the engraver has displayed.

But, beside this, there are many other sources of entertainment in the science of medals. Such is the personal acquaintance which, so to speak, it gives us with all the great men of former times. Nothing can be well more amusing than to read history, with cotemporary coins before you. It brings the actions, in a manner, before our eyes; and we sit, as in a theatre, with the actors before us.

Portraits have been always very interesting to mankind; and there seems little doubt but

the love of them gave rise, not only to painting, but to sculpture. No where are they to be found so ancient, so numerous, so well preserved as in medals. For a knowledge which, though unimportant, is yet, to our trifling natures, most interesting, namely, that of the form and features of those whose virtues and talents almost surpassed humanity, we are indebted to this science only. Lawgivers, monarchs, warriors, authors, all pass, as in a fairy review, before us.

The medal, faithful to its charge of fame,
Through climes and ages bears each form and name;
In one short view, subjected to our eye,
Gods, Emperors, Heroes, Sages, Beauties lie.

POPE.

We even mark, with delight, the surly features of a Perseus, or a Nero, and the lovely countenance of a Faustina, though their vices disgraced human nature.

The subjects of last section also especially regard our amusement from medals. The ideal heads and persons, nay the minutest symbols, afford matter of amusement. The Greek coins of cities present us with exquisite heads of deities, apparently copied from statues or paintings; so

that the works of Apelles and Praxiteles may be guessed at from these extracts. The majesty of Jupiter, the modesty of Diana, the beauty of Venus, the ferocity of Mars, and other ideal characters, appear in the Grecian civic coins with a perfection not to be surpassed by human art.

Still more amusement springs from the reverses of medals, in as much as the variety is greater. To enumerate the various reverses would be infinite and impossible; for there are few objects either of nature, or art, which do not make their appearance on ancient coins.

To this satisfaction we may add that of beholding, in lively portraiture, the various dresses, manners, and customs, religious and civil ceremonies; in short, *the very form and pressure of the times* of the ancients. Medals almost present an history of manners, an article but very lately cultivated, yet perhaps the most useful and interesting of all the provinces of history.

For the ineffable delight which the sheer antiquist takes in any rusty commodity, and defaced medals in particular, we shall not attempt to account, but will leave it to any author who

may, in future times, think of writing a much-wanted treatise on the diseases of the human mind. Certain it is, that men there are of this description, who look upon coins as the more ancient, and of course the more valuable, because the portrait, reverse, and legends, are almost totally obliterated, or at least so far as not to be recognizable by the most plodding assiduity, and forlorn conjecture. That exquisite device for a tattered banner,

Quanto e piu lacera, tanto e piu bella,

is their aphorism on the score of coins; whereas to the man of just taste, the perfect preservation of a medal forms one of its principal qualities.

Yet there is a different pleasure in antiquarian objects and pursuits, felt by the most vigorous and enlightened minds. The delight of the antiquist may be called a depraved appetite of the mind, which feeds on trash, and fills itself with emptiness. It is perhaps a mere childish curiosity, mingled with caprice, and hypochondriacism. Against this character the ridicule of Scriblerus is particularly shot; but with little effect, for our antiquists exceed in visions and nonsense. I say antiquists, for the name of anti-

quary is sacred. By antiquary, in foreign countries, is implied a man who illustrates their ancient laws, manners, poetry, but especially their ancient history. There men of the most elevated minds are antiquaries, as Muratori, Leibnitz, Montesquieu, Du Bos. Here men of talents will not stoop, forsooth, to studies the most important to their country, but leave its antiquities to chance. Every thing is important but our history; and we are profound in every ancient matter that is superficial, and superficial in what is profound. Even England cannot boast of one general historian, but trusts to the inaccuracy of Rapin, and the pleasing elegance of Hume. It is, therefore, no wonder that the study of antiquity is here ridiculous; though most important in other countries, none requiring greater talents, learning, or industry. But the historic antiquary has the pleasure of benefiting society, and enlightening whole nations, while the medallic has only an innocent amusement. This amusement, considered merely as rising from antiquarian objects, has not been explained, though felt by most people, and the more by the more learned. It seems analogical with that which we derive from an extensive prospect: for as the mind delights to expand itself into distant places, so also into distant

times. We connect ourselves with these times, and feel as it were a double existence. The passions are singularly affected by minute circumstances, though mute to generalities; and the relics of antiquity impress us more than its general history. A coin of Julius Cæsar, for instance, brings him closer to our ideas, and imprints him more on our mind. The principle of curiosity implanted in our breast, as the prime spring of knowledge, also concurs. Cicero observes the pleasure we feel in spots remarkable for great actions, or other memorable histories, and a similar sensation appears to contribute to antiquarian amusement. Our senses are most affected by sensible objects; hence tokens of distant friends, and the whole frippery of relics of saints. But it is difficult to anatomise such a subject; and these ideas are submitted to the reader's reflexion.

SECTION V.

Metals used in the Fabrication of Coins and Medals.

THESE metals are well known to be principally three; Gold, Silver, and the various modifications of Copper.

The standard of the utmost purity of gold is fixed at twenty-four carats. From these twenty-four carats almost every nation in modern Europe has deducted nearly two, which are made up of alloy; so that the most usual purity of coined gold amounts to about twenty-two carats.

The purifying of gold to its highest standard is a work of art and toil, unknown in the early times. Hence the most ancient gold coins existing, those of Lydia, and other states in Asia Minor, are not of the purest gold. This metal is never found in its natural state above

twenty-two carats fine, but generally under that standard; and those earliest coins, presenting the gold in its natural state, are much under it. Many of them indeed seem of the metal anciently called *electrum*, consisting of gold and silver.

• But when Philip of Macedon coined the first gold of Greece, procured from the mines of Philippi in Thrace, the art of refining gold had attained great perfection, for his coins are of the utmost purity. They are rivalled by those of his son Alexander, and of other princes and cities within a few centuries of that age. The gold coins of the Egyptian Ptolemys are of twenty-three carats three grains fine, and only one grain alloy. The progress of the arts encouraged this refinement of gold, for the finer gold is, it is the more malleable, and workable.

The Roman gold coinage appearing long after the art of refining the metal was brought to a great height, it is very pure from the earliest times. Some writers say that the coins of Titus fall from the old purity; but this is false, for from actual trial of the coins, it is clear that no change takes place till the reign of Severus,

and then only in very few instances. Most of the Roman gold was brought from Dalmatia and Dacia, where that metal is still found. The eastern part of Hungary belongs to Ancient Dacia, and a remarkable phænomenon of gold is there observed, for it germinates up the vines at Tokay, and is found in the stem*; as it is in the straw of corn in another place.

We are informed by Pliny, that most gold was found mixed with silver; and when the latter amounted to one fifth, the metal was called *electrum*. Sometimes, as he observes, the silver was added. He says the gold was refined by mercury, which mingled with it, but rejected all alloy, and the gold was after delivered from the mercury, by squeezing them in skins, upon which the mercury ran through, and left the pure gold†. In his time

* *Germinans illud aurum, quod in vineis Tokaiensibus viti,*
in agro Vetulosiensi *culmis* hærescit quandoque. *Kol in notis*
ad Olahi Hungariam. Vindob. 1763, 8vo.

† *Omnia ei (argento vivo) innatant, præter aurum; id*
unum ad se trahit. Ideo et optime purgat, cæteras ejus sordes
expuens, crebro jactatu fictilibus in vasis. Ita vitiis abjec-
tis, ut et ipsum ab auro discølat, in pelles subactas effun-

indeed gold was very refined, for Bodin tells us that the goldsmiths of Paris, upon melting a Vespasian of gold, found only a 788th part alloy.

The most ancient silver is, like the gold, not of such purity as in succeeding times, most of the Greek in particular. The Roman silver is rather inferior to the present standard, even from the beginning; but in the time of Severus very bad silver appears, and continues till that of Diocletian. Let not the reader however fall into the error of many medallist writers, who mistake the *denarii aerei*, or copper washed with silver, for silver currency. From Claudius Gothicus to Diocletian, that is from the year 270 till 284, silver coins are extremely scarce. During these fourteen years no less than eight emperors reigned. Usurpers arose in Gaul, who injured the commerce with Spain, where most silver was found; and the constant commotions concurred; so that even the gold coins of those

ditur, per quas sudoris vice defluens purum relinquit aurum.
xxxiii. 6.—Harduin for *vitiis abjectis* reads *vestibus injectis*, because Vitruvius used that phrase speaking of quite a different matter! This rash madman was the worst editor Pliny could have, and an edition by a society of literati is much wanted.

eight emperors are extremely rare. Silver is still scarcer, but is actually found of most of those eight princes: and it is certain that copper washed with silver was not silver currency, but quite a distinct coinage, of which see afterward. But, long before this, occasional depravations of silver coin had taken place. Pliny* tells us that Antony mixed iron with his silver denarii; and I have seen, and tried, a denarius of Antony LEG. VI, which flies to a magnet like iron.

Proceeding to the brass employed in mintage by the ancients: when pure, which is rather uncommon, it consists of two kinds; the red, or what the ancients called Cyprian brass, what we call copper; and the yellow, or brass.

As medals of these metals are generally covered with patina, no attention has yet been paid to the difference. But it shall afterward be shown that, in Roman coins, brass was double the value of copper; and there is reason to think that the Greeks followed the same rule. For to make brass out of copper, the native metal, required art and toil. So far as I have

* *Miscuit denario Triumvir Antonius ferrum.* xxxiii. 9.

observed, brass is most generally employed in Greek coinage. In the Roman imperial the largest size, or *sestertii*, are always of brass; the middle size are partly brass, partly copper; the former being *dupondiarii*, and double the value of the latter, which are *ases*. But of this when we come to the value of Roman money.

Having spoken of these three pure metals, let us proceed to mention the mixed. With us every coin of mixed metal is looked upon, without hesitation, as the produce of a forger's craft; but with the ancients it was otherwise; their coins in mixed metals being numerous.

Taking these mixtures according to their dignity, the first which occurs is *electrum*, being of gold and silver, the latter amounting to the fifth part, or upward. It was either found naturally so, as Pliny says, or done by art. The earliest coins of Lydia, and other states of Asia Minor, are often in this metal; as are those of the kings of the Bosphorus Cimmerius, during the imperial ages of Rome.

The next in value were Corinthian brass, had the ancients even struck a single medal in that metal, which, unfortunately for many a fond

antiquary, they did not. That celebrated metal, during the very little time it was ever known at all, was certainly only employed in the fabrication of vases and other ornamental toys. Indeed, its æra of being in use was, at any rate, very short; for Pliny the Elder tells us, that for a long time it had been utterly unknown*. With reason, therefore, we may laugh at those deluded authors, who pretend not only to find this metal in imperial coins, but even to find three kinds of it; namely, 1. That in which gold predominates: 2. That in which silver is most eminent: 3. That in which brass is the most plenteous metal. I suspect Enea Vico, one of the earliest writers on medals, to have been the author of this strange idea; which Savot, a writer of the beginning of the seventeenth century, had sense enough to confute. Vico mentions, as of this kind, the coin of Augustus, struck under Tiberius, with his statue CONSENSV SENAT. ET. EQ. ORDIN. P. Q. R. the PIETAS, SALVS, IVSTITIA of Livia, the CIVITATIBVS ASIÆ RESTITVTIS; the SPES, and piece with the civic crown of Claudius. The mistake must have arisen from the circum-

* Adeoque exolevit fundendi æris pretiosi ratio, ut jam diu ne fortuna quidem in ære jus artis habeat. Hist. Nat. XXXIV. 2.

stance of the first propagator of it not being able to account for the various mixtures and modifications of brass, observable in ancient coins of the large size; and which, especially in so common a metal, appear so odd to modern eyes. But, not to mention the authority of Pliny, above quoted, which is perfect proof; or that of later antiquaries, who all declare that they have never seen one coin of Corinthian brass, or brass mingled with the slightest proportion of gold or silver; there is another evidence of such simple structure, and yet such vast weight, that nothing can well mark the absence of antiquaries more than its omission, namely, that it is in the imperial *sestertii* worth about two - pence, and *dupondiarii* worth about a penny, that this precious metal is discovered, for I remember not to have heard of medallions in it. As the great size and weight of these pieces are well known, and they passed in common currency for so little, it were truly surprising could the ancients have afforded any gold or silver in their fabric; nay, a predominance of either metal over the brass!

The fact is that these coins, which some medallic authors have called Corinthian brass, are only struck on a modification of common brass.

Zinc, of which lapis calaminaris is the ore, when mingled with copper in the furnace, gives it a great variety of hues; in proportion to the quality of the zinc, or of the copper. The best and finest of these hues belongs to what is now termed *prince's metal*, which seems to be that which the first medallists called Corinthian brass. A late writer observes that there are certain substances which may properly be called ores of zinc, such as lapis calaminaris or calamine, as also native cadmia. This is of a very irregular figure, sometimes spungy, and now and then solid. It is sometimes of a gold colour, and sometimes red, and at other times grey, or of the mixture of them all. It is not very heavy, nor hard; and, when broken in pieces, it immediately emits a flame of a greenish colour, and exhales a white thick copious fume, of a smell peculiar to itself, which condenses into very light flowers, at first blueish, and then of a greyish white. But care must be taken that the calamine be not mixed with a yellow sulphureous pyrites, or the white arsenical one, nor yet with lead ore. Zinc, by some called *spelter*, and by others *tuttenag*, mixes readily with lead, and tin, rendering them more brittle, and less malleable. When it is by fusion mixed with four times the quantity of copper, it becomes a

brittle metal of a gold colour, which is well known by the name of *prince's*, or *bath metal*. The making of prince's metal is by melting three ounces of copper with half an ounce of zine; and when it is cold, it will appear of a fine gold colour, remaining ductile with a hammer*. In short, we know from Pliny, that those coins mistaken for Corinthian brass were of copper and cadmia, that is prince's metal.

To place the succeeding sorts of mixtures according to their actual value, were an attempt as superfluous as difficult. They shall therefore be detailed as they rise to memory.

Of Egyptian coins, struck under the Roman emperors, some are at first of tolerable silver; but by degrees they degenerate into a metal, called by the French medallic writers *potin*, being a mixture of copper and tin with a little silver. These coins are remarkably thick; but many of them elegantly done, in a peculiar style, with uncommon reverses. The Abbé Rothelin, a noted collector of this century, had a complete suit of this metal: and among us Craven Ord, Esq. possesses a fine set. There

* Brookes's Nat. Hist. Vol. V.

are likewise brass coins of Egypt, of three sizes, from the earliest Roman emperors there, and of a different fabrication. Some coins of what is called large brass, are of those mixtures now called pot-metal, and bell-metal. After the time of Valerian and Gallienus, coinage of brass with a small addition of silver, is that authorised by the state, being the *denarii aerii*. The coins of lead or copper, plated with gold or silver, are by Roman forgers.

Coins have been found in lead of undoubted antiquity. Some such of Tigranes are mentioned as genuine by Jobert; but are now perfectly known to be forgeries. An ancient writer informs that tin money was issued by Dionysius, one of the Sicilian tyrants, but none has been found.

In Rome leaden coins must have been pretty ancient, for Plautus mentions them in one or two passages of his plays*; and a few imperial ones have been found, but they are chiefly tryal

* *Trinummi*. Act. IV. Sc. 4. et *alibi*. The *Nigra Moneta* of Martial, lib. I. ep. 100, is thought leaden money. Some however deny leaden money among the Romans, and say that *Plumbeus* was merely a term for a thing of no value.

pieces*, in order to enable the artist to judge of the progress of the dye. Others are those which have been plated by forgers, but the covering worn off. In 1740 Ficoroni published at Rome his *Piombi Antichi*, in which he gives a great number of leaden coins. He supposes that many served for tickets to the guests at festivals. That strange work the *Notitia Imperii Romani*, written in the days of Arcadius and Honorius, and worthy of that benighted period, mentions, if I remember right, coins of leather, among others, of which delineations are there given; and which are totally unlike any ancient coins yet found, or ever to be found.

A few particulars relating to ancient coins which deserve notice, and yet which do not so properly fall under any of the other sections of this work, nor are proposed to be treated at such length as to constitute sections of themselves, I shall beg leave to state here.

The ROMAN MINT, as the most important of

* So Passeri says many leaden coins may be numbered, 'inter experimenta monetariorum, inter quæ sæpe occurrunt formæ quædam, quæ nummos maximi moduli veluti præludia antecesserunt, quos æreos nondum invenimus.' *De re num. Etrusc.*

these articles, deserves to be first mentioned. Of the Greek mints we know little or nothing, but the excellence of the engravers employed; the most important object indeed to the lover of medals. But the Roman mint we know was justly regarded as one of the most essential ornaments and sinews of the state. Its importance was vast, from the vastness of that empire through which its produce was to circulate.

Not to enter at large into the subject, which indeed cannot be expected here, a few notices only shall be given which are most necessary to the science of medals.

The *Questor* seems at first to have had the direction of the mint, as well as the treasury. About the time of the first coinage of silver in Rome, or 266 years before Christ, the *Triumviri Monetales* seem to have been created*.

* Pomponius ascribes their first creation to the year of Rome 463, or 289 before Christ. *Ad legem 2. § de origine juris.* On coins of Augustus and Tiberius their names are common with III VIR. A. A. A. F. F. *Triumviri Auro, Argentio, Aere, Flando, Feriundo*: Triumvirs for melting and striking Gold, Silver, and Brass. Julius made *Quatuor viri* who continued for 15 years, till the battle of Actium, when Augustus restored the *Triumviri*.

They were at first of the senatorial rank, till Augustus appointed them from the equestrian; and the alteration seems to have continued. However this be, the title *Triumviri* remained till after Caracalla, as appears from inscriptions given us by Gruter, and by Bouteroue. But under Aurelian it is probable there was but one master of the Roman mint, called the *Rationalis**: and I suspect this change took place under Gallienus. Aurelian having conquered the revolted provinces, and united the whole empire again, seems to have altered the form of the mints in the capital provincial cities, and to have ordered them all to strike money with Latin legends, and of the same forms; for with him first appear coins on this plan with mint-marks of cities and offices. He seems also to have permitted the provincial cities to strike gold and silver, as at Rome. And we know from his coins that the *aureus*, which had diminished by degrees to about 80 grains, was by him restored to 100†. It is to

* Vopiscus, in Aureliano.

† On the coinages of silver, billon, or *denarii aerei*, and brass, every medallist knows no change took place under Aurelian. That emperor from the abundance of gold he met with in his eastern conquests, concluded it to be commoner in nature than silver, as Vopiscus tells us.

these causes perhaps that we may attribute the noted rebellion of the moneyers in his reign, who in fact by the above regulations must have suffered the loss of half their profits; beside three fourths of them losing work. And 1000 workmen deprived of bread, for we cannot well suppose those ejected to be more numerous, will cause commotions in even the most potent government; but Mr. Gibbon has well shown that Aurelian's concealed foes took this occasion to excite a serious rebellion, in which he lost 7000 of his best troops. It is likely that the *Procurator Monetæ*, who seems to have succeeded the *Rationalis*, first arose about this time*.

In the Roman colonies the direction of the mint appears to have been with the duumviri, or two annual magistrates elected in imitation of the consuls at Rome. Their names often occur upon colonial coin, which though generally of

* We learn from the *Notitia* that *Procurator* was the style in that time, for under the title, *Sub Dispositione Viri illustris Comitum Sacrarum Largitionum* is this list. PROCURATORES MONETÆ. *Procurator Monetæ Siscianæ. Procurat. Monetæ Aquileiensis. Procurat. Monetæ Urbis Romæ. Procurat. Monetæ Lugdunensis. Procurat. Monetæ Arelatensis. Procurat. Monetæ Tiberorum.*

rude invention, and ruder execution, is yet often interesting and important.

The ancient manner of coining was very simple as we may judge from the coins themselves, and from the instruments, as they are represented on the reverses of some ancient medals, particularly one with this legend, T. CARISIVS. The engraving of the dye was indeed a work of much labour and genius, and at Rome Greek artists were usually employed in it. It is thought surprising that hardly any two ancient coins have been found exactly the same, there being always some minute alteration or other. Hence many antiquaries have been induced to that wild opinion, that there was never, in the good ages of the Roman empire, above one coin struck from one dye. Indeed M. Beauvais, a most able judge of these matters, informs us that the only two Roman imperial coins of the first times, which he had seen perfectly alike, were of Galba: and competent judges of this science caution us, when we meet with two coins quite alike, to be upon our guard against the falsity of one of them. It must also be observed that the differences in coins, apparently from the same dye, are often very minute, so as sometimes to escape an eye

not used to microscopic observation of this sort. But in fact it would be surprising if any two ancient coins were now found struck with the same dye; for out of each million issued, not above one has reached us. Dyes soon give way by the violence of the work; and the ancients had no puncheons nor matrices, but were forced to engrave many dyes for the same coin. Even in our mint, upon sending for a shilling's worth of new half-pence, it will appear that three, or four, dyes have been used. Sometimes the obverse of the dye gives way, sometimes the reverse; but among us it is renewed by puncheons, though with variations in the lettering, or other minute strokes; while the ancients were forced to recur to another dye differently engraven.

The engravers of the the dye were called *Coelatores**. Other officers employed in the Roman mint were the assayers of the metal, *Spectatores*, *Expectatores*, or *Nummularii*. The refiners *Cenarii*. The melters *Fusarii*, *Flatuarii*, *Flatuarii*. The *Equatores Monetarum* who adjusted

* Bouteroue, from whom our account of the Roman mint is chiefly derived, gives us this ancient inscription: *M. Canuleius Zocimus. Hæc arte, in Coelatura Clodiana, evexit omnes.*

the weight. The *Suppostores* who put the pieces in the dye, and the *Malleatores* who struck it. A *Primicerius* was at the head of each office; and there was a foreman called *Optio et Exactor*.

The metal, when assayed and refined, was cast by the melters in the shape of bullets, in order to assist the high relief. This operation, expressed in the title of the *triumviri monetales*, by *flando*, is evident from the ancient coins, which are not cut, or filed, on the edges; but often cracked, and always rough and unequal. In modern coinage the blank pieces are flat; and cut round by the stroke of a machine: a plan followed even in the seventh or eighth century, and after, as appears from our heptarchic pennies, which are accurately cut in a perfect circle. These bullets were then put into the dye; and received the impression by repeated strokes of the hammer, *feriundo*. Sometimes it would seem that a machine was used to stamp the coins, for Bouteroue tells us that in a grotto near Baia was a picture of the Roman mintage, and a machine represented which upheld a large stone, seemingly with intent that, by dropping it at once, it should strike the coin.

It is looked upon as a certain rule in this

science, that none of the ancient money was cast in moulds, except the most ancient and very large Roman brass, vulgarly called weights, and other Italian pieces of that sort. All other cast coins are forgeries of ancient or of modern times: for this was a manœuvre of the ancient forgers, as we learn from several Roman moulds* which have been found, and which have led the unskilful to imagine that the ancients first cast their money in dyes, and then stamped it, to make the impression more deep and sharp; an idea so utterly absurd as to need no confutation.

The ancients, though strangers to the art of impressing legends upon the edge of their money, like the DECUS ET TUTAMEN upon our crown pieces, and to the fine indentation observable on our gold, yet knew something of crenating the edges of their coin. This they did by cutting out regular notches on the edges. Some of the Syrian coins, and of the Roman consular, with a few other early ones, are ornamented in this manner. The former were cast in this shape, then struck. The latter was done by incision to prevent forgery, by showing the inside of the metal. They were anciently called

* A print of one may be seen in the *Nummi Pembrokiani*.

serrati, and Tacitus says the Germans preferred them to other Roman coins. But the old forgers also imitated this; and I have a serrated consular coin, of which the incisions, like the rest, are plated with silver over copper.

It may not be improper to add to this section some hints as to the number of ancient coins, with quite different reverses, which we have. The Abbé Rothelin had in his cabinet no less than 1800 coins of Probus, whose reign was but of seven years. The number of Roman gold imperial coins may amount to 5000; the silver to 10,000; and the brass to 30,000. The whole of the different ancient coins, known to us, to about 80,000. But this calculation cannot be very accurate.

SECTION VI.

*The different Sizes, and original Value, of
Greek Coins.*

IN the rest of this work, Greek and Roman coins are considered as Medals, but in this and the following section as Money; a part of my plan, perhaps the most useful, if not the most interesting.

Nisi utile est quod facimus stulta est gloria.

PHÆDRUS.

A knowledge of this subject is so necessary to every reader of the classics, as almost to dispute the preference with the studies of ancient Geography and Chronology. It is no wonder then that many of the most learned writers in every age and country, from Budæus, whose work was published about 1520, to Clarke who gave his in 1767, have undertaken so interesting a theme; and it might be expected of course, that every part of it had been, by such di-

ligent investigation, laid open to every capacity. Yet this is so far from being the case, that we are yet in the rudiments of the science, in so far as concerns the real money of the ancients. The ideal, which is indeed the most important province of discussion, has been pretty clearly ascertained; and we are almost as well acquainted with the Attic *mina*, or *mina*, and the perplexing progress of the Roman *sestertia*, as with our own *pounds*. But with the actual coin of the ancients the case is different; and the ignorance even of the learned, in this point, is wonderful.

This is owing to two causes. Those men of erudition who have made such laborious inquiries into the ideal money of the Greeks and Romans, have never been medallists: and medallists have never entered upon this discussion. It is doubtful indeed whether the former class display greater ignorance of the coins themselves; or medallists of this theoretic part of the science. Nor has the great progress of the study of medals had any effect upon this important subject; for Arbuthnot, and Clarke, the latest writers, are, if possible, more ignorant of medals than Budæus, the very first. The latter professes his love of

medals, but quotes a consular coin with the head of Cicero; and looks upon one of the thirty pieces of silver, the reward of the treachery of Judas, and which was said to be preserved among some relics at Paris, as worthy of reference and memoration. Arbuthnot*, if we judge from his book, had never seen any ancient coins; and Clarke, it is well known, was quite ignorant of them. The latter, with all his labour, seems to have known nothing of the theoretic part of the real ancient money; else he could not have fallen into such strange slips as this, in page 172 of his work: “The ærei
“ were of several sorts; the denarius æreus,
“ the follis, and sestertius æreus; *i. e. the*
“ *as, and its subdivisions.*” The least of these, the follis, *or* sestertius æreus, was worth at least four ases, instead of being a subdivision of it. Indeed Dr. Mead’s Catalogue seems to have been almost the only *book* on medals which had undergone his perusal.

On the other hand, the ignorance of medalists on this score is no less profound. To this day they look upon the didrachms of

* His work, as the preface says, is taken from the *Historia rei nummariae* of Hostius.

Aegina, so celebrated in antiquity, as tri-drachms of Aegium; and upon the early obolus as a brass coin. In the Roman class the large brass is esteemed the *as*, while it shall be proved a little further on that it is the *sestertius*, and worth four *ases*. The denarius is reckoned at ten *ases*, even in the imperial times: whereas it only went at that rate for the first ninety years after the coinage of silver at Rome. The denarius *æreus* is taken for silver currency: with other mistakes which evince that medallists are as ignorant of the theory, as the others are of the practice.

It is the intention of this little view to join the medallic science with the theoretic; and to illustrate each by the assistance of the other, Sensible however of the difficulty of the subject, the author only pretends to point out the path which ought to be pursued: as in an attempt, which is yet so full of novelty, mistakes may at first arise which future discoveries may remove. At the same time he must say that he has spared no labour upon this subject; but with what success the reader must determine.

Most books upon this branch of science are filled with controversy upon articles which can-

not be settled by any inquiry whatever; nay, upon points which are foreign to the subject.. Well may it be said to these writers, in the words of him in Terence,

Fecistis probe! Incertior sum multo quam dudum.

Avoiding endless debate the author shall only arrange a clear account of the Greek and Roman money, illustrated by perpetual reference to the coins themselves. If occasion unavoidably arises of arraigning former writers, it shall be done with such candour, and rigid justice, as the author would wish to be used toward himself by any to whom his opinion may seem censurable. This consideration seems totally to have escaped former writers upon this matter, who judge as if they were never to be judged. The whole acrimony of their style shall be avoided, along with their positiveness. It may ever be observed that they are most positive when they are most in the wrong; as might be evinced from the *sestertius nunquam aereus fuit* of Budæus, and Gronovius, down to similar assertions of Arbuthnot and Clarke, equally strong and equally false. In this little Essay the words and phrases *certainly, surely, no one can controvert, it is beyond a shadow of doubt*, and the like, shall be regarded as unknown to the language; and the

terms *perhaps, it is probable, it would seem, we may suppose*, substituted in their room.

ARTICLE I. GREEK SILVER.

It is a common, and very just observation, that the light of science, like that of the sun, has always moved from east to west. From the east, therefore, it is most probable that the first invention of money arose, like the other arts and sciences; and spread from thence into the western countries of the world.

The first shape in which money appeared, it is well known, was that of pieces of metal, without stated form or impression, but merely regulated to a certain weight. For weight was the grand standard of ancient coinage; in so much that all large sums were paid in weight even down to the Saxon period of England. With us weight is now applied to each particular piece, and that only in gold; whereas, with the ancients, weight was applied to the sum total; to silver, as well as gold; nay, in some instances to brass. This distinction it is begged that the reader will bear in mind, else

he will hardly attain a clear idea of the ancient money.

As weight was thus the original mode of money, independant of impression, it will be proper to treat first of such large sums as were determinable by weight ere we proceed to the species of coins, or that part which succeeded the former, and was more speedily judged of by the form and impression of each particular coin. This method is no doubt new, but is the most consonant to precision, and to the progress of coinage.

In Greece, to which this section relates, large sums were referred to so many *mnae*, or *minae*; and the yet larger denomination of so many *talents*. The mina of every country is thought to have contained 100 drachmæ, or small silver coins of that country; and the talent 60 minæ. The mina is regarded as a pound weight of the country to which it belonged. The Attic pound is considered as the same with the Roman, and very nearly our pound Troy. Dr. Arbuthnot asserts the common Attic pound to have been of 16 ounces and equal to our pound Avoirdupois; merely that he may easily explain a

passage in Livy: but against this absurd assertion every ancient author conspires.

The mina of Athens had, at first, 73 drachmæ; but Solon gave it 100 *. The drachm in ancient weight, as now in medical weight, was an eighth part of an ounce. In coinage also eight drachms went to the ounce; the mina or pound of 12 ounces in course had 96; but four were given to the round sum to supply defects in alloy; and indeed in consequence of a common practice in all ages and countries, of giving some addition to a large weight. Thus the pound in weight had but 96 drachmæ in fact, while the pound in tale had 100; as the Roman libra in weight had but 84 denarii; in tale 100; and as our pound in tale, by an inverse progress, is not a third of our pound in weight.

The common, or lesser, talent of Athens had 60 minæ; or 6000 drachms. The other ancient talents used in coinage, if we trust Dr. Arbuthnot, and his authorities, stood thus with regard to the Athenian.

* Plutarch in Solone.

	<i>Attic Minæ.</i>
The Syrian Talent had	15
The Ptolemaic	20
The Antiochian	60
The Eubæan	60
The Babylonian	70
The larger Attic	80
The Tyrian	80
The Egyptian	80
The Aeginæan	100
The Rhodian	100

Putting the Attic drachm of silver at 9 pence of our money, the best medium value, the mina of Athens will be worth 3*l.* 15*s.* and the Athenian common talent 225*l.* The rest may easily be estimated in proportion*.

But for my own part I question this list of talents much; and indeed many ancient authorities are little to be relied on. Writers on this subject confess that the numbers in all ancient MSS. are the parts most subject to error, as being almost always contracted.

* To ascertain the coinage of each country to the standard of its particular talent were a task of infinite toil, and, it may be suspected, impracticable.

They ought also to allow that the authors themselves must often be liable to wrong information.

Herodotus* mentions that Darius king of Persia ordered gold to be paid into his treasury by the Eubæic talent, and silver by the Babylonian. The Eubæic is esteemed to be that afterward called the Attic; and as we estimate gold by carats, so it seems natural that the most precious metal would be regulated by the most minute weight. But I confess I take the Babylonian talent to be the same with that of Aegina. Mr. Raper† has proved the first coins of Macedonia to be upon the standard of Aegina. Now the early Persian coins are upon that very scale; the largest tetradrachms weighing from 430 to 440 grains. Hence it follows that the Persian silver coins were of the Aeginian standard: and the payment was certainly to be made according to the standard of the money.

The larger Attic talent was of 80 lesser minæ,

* Lib. III. c. 89.

† Enquiry into the Value of the Ancient Greek and Roman Money, London, 1772, 4to.

because the larger Attic mina was of 16 ounces. Festus tells us that the Alexandrian talent, which was the same which the Egyptian kings seem to have used in their coins, was of 12,000 denarii. He means that it was the Talent of Aegina, for so the coins of the Ptolemies instruct us, as Mr. Raper has also shown. Perhaps the whole ancient coins of Asia, Africa, Greece, Magna Græcia, and Sicily, are reducible to three talents or standards.

I. That of Aegina used in most of the more ancient silver coinages; and as would seem in even the later of Egypt, Carthage, Cyrene, &c.

II. The Attic, being the Asiatic gold standard; afterwards used by Phidon, king of Argos, in estimating gold, and called Eubæic from Euboea, one of the quarters of the city of Argos. It was afterwards used in Athens, and the greater part of the world, as the standard both of gold and silver.

III. The Doric, or Sicilian talent, of 24 nummi, each worth an obolus and a half* ;

* Aristot. in Pollux, lib. ix. c. 6.

whence the talent is estimated at six Attic drachms, or three darics.

Those weights continued the standard of money after it began to be distinguished by impression; nay, to the fall of Greece, and prevalence of the Roman empire.

According to Herodotus the Lydians first invented coinage, and from them it seems quickly to have passed to the Greeks. The Lydians could not have the invention from the Persians, their eastern neighbours, whose empire only began 570 years before Christ; but perhaps it sprung from the Syrians, so famous for early commerce. Let us proceed to the first Greek coinage, which was that of silver.

The most ancient **SILVER** coins of Greece are those with the indented mark upon one side, and a tortoise on the other. The earliest have no letters*; but the later, palpably of the same place, have ΑΙΓΙ, which medallists have

* Montfaucon in his *Palæographia Græca*, p. 143, says the monogram on the first coins is ΑΙΓΙΝΗΤΩΝ. All the letters are certainly found in it, the Α and Ω being at first square; and on this subject there is not a better judge.

hitherto interpreted Aegium in Achaia; induced by the tortoise, which they look upon as the sure badge of the Peloponnesus. In this they are right; but the conclusion they draw from it, that these coins belong to Aegium, seems to me very wide of the truth.

In Dr. Hunter's cabinet, there are no less than eleven of these coins, and they are not uncommon elsewhere; which proves that the place where they have been struck must have been rich and eminent at the time, else so many of so very remote antiquity could not have reached us. Now Aegium in Achaia was, till the days of Aratus, till the later days of Greece, of no eminence: and of silver coins which have the name ΑΙΓΙΕΩΝ at full length, and which perhaps belong to Aegium in Achaia, not above one or two are in that vast collection. Is it consonant to possibility to suppose that as a place became opulent, its coinage decreased? But leaving this argument, it is certain that these coins are upon the scale of no other Grecian money: they being of 8, 13, $15\frac{1}{2}$, 90, and about 186 grains. The Grecian drachma is of 66 grains at an average, and it were strange if pieces had been struck of eight tenths of an obolus,

of an obolus and a half, or of a drachma and a half.

Beside, who will suppose that Aegium was the first city in Greece which struck money? A remote village in early times, not a regal seat; of no fame, of no power, of no commerce, of no wealth. It is mentioned by Homer very slightly as of no account; though, as we learn from Pausanias, it long after this rose to eminence from the ruins of four towns, whose inhabitants came to it. If the invention of Grecian coinage must be given to Achaia, why may not the ΑΙΓΙ imply Aegialus, the ancient name of Sicyon, a city of wealth and extent? But for my own part I have little doubt but these coins are of the celebrated mint of Aegina, perhaps the earliest in Greece.

For some authors* inform us that the first money coined at all, was that struck in the island

* Εφορος δ' εν Αργινη αργυρον πρωτον κοπηται φησιν υπο Φειδωνος. Strabo, lib. viii. Και πρωτοι (Αιγινεται) νομιζμα εκοψαντο και εξ αυτων εκληθη νομισμα Αιγινειον. Elian. Var. Hist. lib. xii. c. 10. But Ephorus, who seems the fountain of this tale, is a very bad authority.

of Aegina by Phidon king of the Argives. His reign is fixed by the Arundelian marbles, which, if I rightly recollect, also mention this coinage, to an æra correspondent to about 820 years before Christ. The tortoise marked upon these coins, and the known badge of the Peloponnesus, which amid surrounding seas was safe as a tortoise in its shell, may have been the badge of Argos also, as one of the most important of its cities.

But, not to infer that any of these remarkable old coins were really struck in Phidon's time, it is certain that the coins of Aegina were famous, among the Greeks, for antiquity and peculiarity. And Aegina long maintained her glory and independence, for, in the war of Xerxes against Greece, she was mistress of the sea by means of a numerous navy*: and Herodotus tells us that, of all the cities engaged in that arduous conflict, she bore away the palm. Let us then take these coins from Aegium, at the time of this coinage an obscure town, and give them to this famous and opulent isle; the Britain in miniature of the

* See Plutarch in Themistocles and in Pericles. Aegina was the great rival of Athens, and Pericles was as anxious for its destruction as Cato was for that of Carthage.

Grecian seas, the grand seat of Grecian navigation, and of eastern commerce.

But there are yet other, and stronger, arguments for these remarkable coins being of Aegina, to be drawn from their weight; not to mention their workmanship, which is quite different from those which have the name of Aegium at full length. It is well known that the coinage of Aegina was different from the common Greek standard; insomuch that the drachma of Aegina was worth 10 Attic oboli, while the Attic drachma only bore 6. Hence the Greeks gave the drachmas of Aegina the name of *παχειαν*, or *thick**, a name peculiarly applicable to the very coins of which we speak. Now from the different weights above mentioned, and which can be reconciled in no shape to the other Greek coins, the very weight of the drachmas of Aegina may perhaps be ascertained. For, according to the just proportion, the drachma of Aegina should weigh about 110 grains; and one of the above coins very much

* *Λεπτας και παχειας Ζαλευκος εν νομοις τας δραχμας. λεπτας μεν τας εξοβολους, παχειας δε τας πλεον εχουσας.*
Hesych. Pollux tells us that the Athenians called the drachma of Aegina *παχεια* for distinction.

rubbed weighs 90. The others of larger size, which seem didrachms of Aegina, weigh from 181 to 194 grains; but as the last is the only one in good preservation, no medium can be taken; on the contrary, 10 grains, or so, may be allowed even on the best preserved, as wasted by the vast length of 2400 years, or near, in so soft a metal as silver; which would bring the drachma of Aegina to nearly its proper standard. The obolus of Aegina was in proportion to its drachma of six oboli, and is the piece of $15\frac{1}{2}$ grains, and of 13, when rubbed very much: the hemiobolion is that of 8, which, if perfect, should weigh 9.

Such appears to be the arrangement of this remarkable set of coins; and in which every article falls into its proper place; whereas if you attempt to bring them to the common Greek standard, nothing but confusion arises. Gronovius labours hard to prove that the Corinthians used the standard of Aegina, but the oldest coins of Corinth, as well as the latest, are all upon the common Attic model*.

* The only foundation for the supposed difference between the Corinthian and Attic talent, is the noted story of Demosthenes and Lais, as told by Elian. Lais asked *μυριάς δραχμάς*

After this introductory account of the most ancient Grecian coinage; let us proceed to the consideration of the coins themselves. The leading denomination of the Greek money is the *drachma*, or eighth part of an ounce, a division retained in medical weight to this hour; for the Greek coins had commonly their names from the weights they bore, though, in some instances, the weights received their appellations from the coins. The best medial value which can be put upon the silver drachma is that of nine-pence sterling. Roman authors put the Greek drachma as of the same value with the Roman denarius, though the latter was worth but 8*d.* either inaccurately, or because all the Greek drachmas were ancient, and had lost weight. The *didrachm* of silver, being just double the drachma, as the name implies, is

η ταλαντον, 10,000 Attic drachmas. Demosthenes answers that he will not pay 10,000 drachmas for repentance. Whence they conclude that 10,000 Attic drachmas went to the Corinthian talent. But why may not the meaning be 10,000 drachmas, or, *at least*, a talent? Demosthenes naturally takes the highest number to make the point of his sarcasm sharper. Why may not Elian be quite mistaken? Why may not his MS. be corrupted? The reader will please to attend that there is no better foundation for all of Arbuthnot's talents; save the Attic and Aeginean, in which innumerable writers consent, and are confirmed by the coins, the surest of witnesses.

worth eighteen-pence. The silver *tridrachm* very seldom occurs, and it may well be doubted if medallists do not give this name improperly to the didrachm of the Aeginean standard: however its name tells its value of three drachmas, or two shillings and three-pence of our money. The *tetradrachm* of silver is worth four drachmas, or three shillings sterling; and is the largest form of Greek silver coins, save the tetradrachm of the Aeginean standard, which is worth five shillings.

But there are many divisions of the drachma in silver. The highest is the *tetrobolion*, or coin of four oboli, being in proportion to the drachma as our groat to a six-pence: it weighs about 44 grains, and is worth 6*d.* The next is the *hemidrachm*, or *triobolion*, a piece of half the drachma, or about 33 grains; worth four-pence halfpenny. The silver *diobolion*, or third of the drachma, weighing about 22 grains, is worth 3*d.* The *obolus* of silver weighs about 11 grains, and in ancient currency bore 1½*d.* There is likewise the *hemiobolion* in silver, or half the obolus, of 5½ grains, worth a halfpenny farthing; and the *tetartobolion*, *dichalkos*, or quarter-obolus, which is the most minute

coin yet found, being of $2\frac{1}{4}$ grains, and its current worth a farthing and a half. The last coins are so very small, that it is no wonder most of them have perished: but there is one of Athens in Dr. Hunter's cabinet; and Mr. Stuart, I am told, brought some from Athens. I believe they also occur of Tarentum.

From the Greek writers on Weights and Measures, to be found at the end of the *Thesaurus Linguae Graecae* of *Stephanus**, it would appear that there was a silver coin of about $1\frac{1}{4}$ grain, corresponding in value to the *chalcos*, and thence commonly called the *chalcos*; being one half of the last-mentioned piece, and the eighth part of an obolus. But this must have been so very small that there is little chance of any of them being ever found; or, if they were, the peasants, who are the most common discoverers of coins, would think them beneath

* *Stephani Thes. Ling. Gr. Tom. IV. p. 214.* These authors, fragments of whom relative to weights and measures are there published, are Galen, but dubious, a Cleopatra, Hero, of Alexandria as supposed, and Dioscorides. The whole of them contradict each other in almost every point, and are consequently worthy of no confidence. Clarke and others quote of them what makes for their several opinions, and omit the rest.

all notice; if indeed they did not escape their eyes, like so much dust.

The Grecian silver coins received many different names, as may well be supposed from different states. Of these names we know little, nor is it of any importance. Pollux tells us that the tetradrachm, with the head of Pallas, was often called *Κορν*, or *The Maiden*: a name which he would seem to apply to those of Athens, though there are coins of other cities with the head of Proserpine, and the word *KOPH*, to which it would appear more applicable. *Χελωνη*, *The Shell*, was another name given to a coin from its type *Δημαρετιον*, a Sicilian coin, was so called from the name of Gelon's wife. *Κραπαταλons* was a tetradrachm, and had eight *ευθειας*: the last was a hemidrachm. The *Τροιςηνιον* so called from its country, Troizene, had Pallas on one side, and a trident on the reverse. The *Πελανορ* of Lacedæmon was the hemiobolion, and worth four *chalci*. The *Κολλυβος* is thought to have been equal to the Roman sestertius, and must of course have been a quarter-drachma. These names are found in obscure lexicographers; but as historians and other eminent-writers only reckon by the drachma, mina, and talent, the other

terms are of no consequence. The *cistophori* however deserve mention, being coins with the mystic chest, or hamper, of Bacchus upon them, out of which a serpent rises. These coins are not a little celebrated in antiquity; for we are told by Livy, that Marcus Acilius, in his triumph over Antiochus and the Eto-lians, carried 248,000 of them; Cneius Manlius Vulso in that over Gallo-græcia, had 250,000: and Lucius Emilius Regillus in his naval triumph over the fleets of Antiochus, 131,300. Cicero likewise mentions his being possessed of a vast sum in them*. Different opinions have been formed of them, but that of a learned modern medallist† seems preferable. He tells us they are all silver tetradrachms: and such as he has seen, after bestowing particular attention on them, belong to the cities of Apamea and Laodicea in Phrygia, Pergamus

* Epist. ad Att. lib. II. ep. 1.

† Neuman *Populorum et Regum nummi veteres inediti*, Tom. II. Vindobonæ, 1783, 4to. Pompeius Festus says 7500 *cistophori* were equal to 4000 *denarii*, but he is a writer of no credit. After all Neuman is incorrect, for the *cistophori* weigh about 196 grains at a medium, and may be *didrachms* of the *Aeginean* standard; though perhaps the *tetradrachm*, in the natural progress of coin, was so far diminished.

in Mysia, Sardes and Tralles in Lydia, and Ephesus. Those who ascribe any of them to Crete are, as he informs us, widely mistaken. Indeed Cicero was, at the time he mentions his treasure of them, governor of the province of Asia Minor, which very much confirms this opinion: for it is most likely that his wealth should be in coin of the country where he was. As to the *cistophori* being Cretan money, an opinion hitherto the most prevalent, it is beyond imagination that Crete, a small island, should strike so many coins as the triumphs above mentioned imply. What had these triumphs, or Cicero's government, to do with Cretan money? But indeed the coins themselves, as above noted, establish the fact.

The Cyzicenes, or coins of Cyzicus in Mysia, were also famous in antiquity, and were of gold; but, like the Persian darics, have almost wholly vanished by being recoined in other forms. Hesychius, among other names of coins, mentions the *Αριανδικον νομισμα*, or money of Aryandes, who was made governor of Egypt by Cambyses; none of which have reached us, so far as can be known: for it is probable they were marked with Persian characters, if with any. The same writer takes notice of the *Φιλιστιδιον*

νομισμα, or coin of Philistis, but without telling us where that queen reigned; which is unfortunate, for though many of these coins have reached us, which prove that her reign must have been long, and over an opulent realm, yet it is not determined by medallists, which country ought to be assigned to her. Many are for Sicily*; Begerus inclines rather to Cossara, or Malta; an opinion much more improbable.

But the coins of Athens draw the most particular attention, considered with regard to their names and standard; and so many of them are found of all sizes, that they afford much light to the whole Grecian coinage. It is remarkable that most of the Athenian coins, which have reached us, are of a very late period with the names of magistrates on them. Some such have ΕΠΙ ΜΙΘΡΑΔΑΤΟΥ, and the fabric being much the same, few are older than the æra of that prince, who it is well known seized Athens in his war with the Romans; and I suspect no Athenian coins of silver are posterior to Sylla's

* This seems confirmed by inscriptions ΒΑΣΙΛΙΣΣΑΣ ΦΙΛΙΣΤΙΑΔΟΣ on the *gradini* of the theatre at Syracuse, but which appear not older than the Roman times. See Rudisæl's Voyage to Sicily, by Forster.

infamous destruction of that city: an event the more remarkable, as Sallust tells us that Sylla was learned in Greek. Indeed Caligula, Nero, and most of the pests of society, have been men of learning in spite of a noted axiom of Ovid*. It is still more remarkable that the fabric of Athenian coins is almost universally very rude, a singular circumstance if we reflect how much the arts flourished there. Indeed it can only be accounted for from the excellence of their artists being such, as to occasion all the good ones to be called into other countries, and none but the bad left at home. For in like manner the coins struck at Rome in imperial times are excellent, as being done by the best Greek artists; while those of Greece, though famous at that time for producing miraculous artists, are, during that period, commonly of very mean execution. The opulence of Athens, in her days of glory, was very great, owing in an eminent degree to her rich commerce with the kingdoms on the Euxine sea; carried on chiefly from Delos, which belonged to Athens; and was the grand centre of that trade. Neuman, by the bye, wonders much that when we have many coins of My-

* *Sed ingenuas dedicisse fideliter artes
Emollet mores nec smit esse feros.*

cone, an island poor to a proverb, we should yet have none of Delos, though rich to celebrity. But this circumstance is easily accounted for from the subjection of Delos to Athens; and Mycone's being a free state. It may well be supposed that Athens had a mint at Delos; and perhaps such Athenian coins as have symbols of Apollo, Diana, or Latona, were struck in this island.

ARTICLE II. GREEK BRASS.

The next Greek coinage in point of antiquity is that of COPPER. At what time coinage in that metal first took place in Greece is unknown; but there is reason to think that it was not used at Athens till the 26th year of the Peloponnesian war, when Callias was a second time archon*: being 404 years before Christ, and perhaps three hundred after silver was first coined there. Athenæus tells us that the poet Dionysius was called the brazen orator, because he first persuaded the Athenians to have money of that metal: and we may infer that Dionysius

* Scholiast. in Ranas Aristoph. v. 737. An Enquiry into the Value of the ancient Greek and Roman Money, by Matthew Raper, Esq. F. R. S. 1772, 4to. p. 10.

flourished in the period above mentioned. The first copper coins known are those of Gelo king of Syracuse, about 490 years before our æra.

The first copper coin of Greece seems to have been only the *chalcos* or *piece of brass*; whereof two went to the quarter of the silver obolus, as was remarked above. Demosthenes and other writers of his time speak of no other, when they have occasion to mention a thing of no value: using the phrase *not worth a chalcos*, for worth nothing. As Greece became poor however, the *chalcos* was divided by different states into different portions, which they called *λεπτα*, or *little coins*. These were sometimes rated two, sometimes four, or six, nay eight to the *chalcos*, as the poverty of the state made smaller coins necessary.

For what little intelligence can be supposed to remain, with regard to so unimportant a subject as the copper coins of Greece, we are indebted merely to Pollux, Hesychius, Suidas, and other lexicographers. To all these authors the apophthegm of Pope may therefore be justly applied, that *a man who is capable of writing a dictionary may be supposed to understand the*

meaning of one word, but never that of two put together. Nay, even in the meaning of one word they often make irreconcilable blunders. Pollux, and Suidas copying him, tell us that there were seven lepta to the chalcos, a number the most unlikely that can be, from its undivisibility, and incapacity of proportion. Pollux lived in the time of Commodus, so was too late to be of the smallest authority: Suidas is four or five centuries later, and out of the question. Pliny tells us there were ten chalci to the obolus; Diodorus and Cleopatra that there were six; Isidorus says four: and if such writers differ about the larger denomination, we may well imagine that the smaller equally varied in different states: an idea supported by these undeniable witnesses, the coins which remain.

Most of the Greek copper money that has reached us consists of chalci: the lepta being so small as to be much more liable to perdition. However there are several dilepta of Athens in particular in Dr. Hunter's cabinet; and as the silver diobolus is sometimes distinguished by two owls, or an owl with one head and two bodies, so those little copper pieces with two owls seem to be *dilepta*. A circumstance which of itself could confute Pollux, for a *dilepton* can form no

part of seven; a number indeed which never appeared in any coinage of the same metals, and is contradictory to common sense. It may be observed that the whole brass coins of Athens published by Dr. Combe, are reducible to four sizes; which may be the lepton, dilepton, tetralepton, or hemichalcos, and chalcos. The first is not above the size of one of King James the First's farthing-tokens: the last about that of our common farthing*.

Other names of Greek copper coins have hardly come to our notice. The lepta were also called *κερμα*, as being *change* for the poor; in like manner as the common-wealth pattern farthings bear FOR NECESSARY CHANGE. The *χιδάκος* was one eighth of the hemidrachm; perhaps so called from the *χιδάφος*, or *wolf*, on it; and was the coin of a particular state, which, if in brass, must have weighed three chalci.

Such were the brass coins of Greece previous to the subjection of that country to the Roman empire. But in consequence of the poverty

* Lycurgus ordered iron money at Sparta; but though it was hardened by being put in fire, and quenched in water, the metal is so perishable that none has reached us.

subsequent to that disaster, and the natural progress of money in every state in all ages, most of the denominations very much diminish in value. The gold coinage was totally discontinued in Greece; and that of some Barbaric kings, using the Greek character, who had permission from the Roman emperors to coin gold, seems to have been adapted to the Roman model. Of the very few cities in Asia, using the Greek language, who coined silver in the imperial times, the standard is particular and unknown. And in Greece itself, only copper seems to have been coined; and that upon the Roman standard, then universal, that the currency might circulate every-where. They retained however some of their own terms, using them promiscuously with the Roman. The *assarion*, or *assarium*, of Rome, the name of the diminished *as*, being sixteen to the drachma, or denarius, the obolus was so much lessened in value of metal as to be struck in brass not much larger than the old *chalcus*, and valued at between two and three *assaria*; indeed its ancient rate as to the drachma. This we learn from the copper coins of Chios, which have their names marked on them. The brass obolus, at first equal in size to the Roman sestertius or large brass, lessens by degrees to about the size of a silver drachma.

One of the latter occurs in Gessner, Pl. XLVIII. No. 19, where there is a coin of Nysa with an ear of wheat on one side, ΝΙΣΑΙΩΝ; reverse a youth on the prow of a ship holding a coin in his hand, and οΒολος. The bad copper and brass used in the Greek imperial coinage, show that metal to have been very scarce in Greece, and all the cities using Greek characters; being indeed mostly found in the western countries of the Roman empire.

The æra of the above coins cannot be precisely ascertained, but the period of declension in size must have been from Augustus down to Gallienus,

It may however be safely supposed that the copper obolus, at first above the size of large brass, was used in Greece about the time of her first subjection to Rome*: and that the *lepta* ceasing, the *chalci* came in their room, with the *dichalcus*, and *hemjobolion* of brass. These *chalci* seem however to be frequently called *lepta*, a name common indeed, and with no impropriety to all small coins: for the silver

* Vitruvius, who lived in the time of Augustus, speaks of copper oboli. Lib. III. c. 1.

drachma* was called lepton from its smallness, as was the later assarion† no larger than the later *chalcus*, or the silver drachma.

ARTICLE III. GREEK GOLD.

That any GOLD was coined in Greece before the time of Philip of Macedon there is not sufficient proof. For not one gold coin of Greece has reached us, which bears any marks of being prior to Philip of Macedon, much less of belonging to times far more ancient.

Athens, the most flourishing city in Greece, had no gold money at the beginning of the Peloponnesian war, as we may safely guess from a passage in Thucydides. This historian mentioning the treasure in the Acropolis, or citadel of Athens, at the commencement of that war, speaks of silver coin, and of gold and silver in bullion: had any of the gold been in coin he

* Σικλον—εχει δε δυο λεπτα καλουμενα, α ειςι δραχμαι δυο.
 Hero Alex. in frag. de re num. Λεπτα, δραχμαι, ολκαι, οβολοι,
 are all confounded by later writers. See Gronov. de Pec.
 vet. l. ii. c. 6.

† Ἄ λεπτα καλεται ασσαρια. Epiphanius in Gron. p. 529.

GREEK MONEY.

would doubtless have mentioned it. This was about 428 years before our æra, and Philip began his reign 360 years before Christ, or 68 years afterward. Had any city in Greece coined gold, it may well be supposed that none could have preceded the rich and elegant Athens.

The coinage of gold had however taken place in Sicily very early, owing to the vast commerce and native wealth of that island. For we have gold coins of Gelo before Christ 491, Hiero I. 478, and Dionysius I. 404, all using Greek characters; but not however to be ranked as gold coins of Greece, as Philip's conquest of Greece caused his to be. Nay, gold coins of Syracuse appear of the 3d class of antiquity, or with an indented square, and a small figure in one of its segments. The only cities using Greek characters, of which we have gold coins, are Brettium, and Tarentum, in Magna Græcia; Panticapæa in Thrace, and Cosa likewise in that country, as is well proved by Neuman, not in Tuscany, as hitherto believed; they are however struck by Brutus, as he shows, and out of the question as early Greek coins. Others are of Cyrene, Syracuse, Lampsacus in Mysia: and in Greece of Acarnania of the Ætolians, of

Thebes and of Athens. The Ætolian gold coins were probably struck in the time of their greatest power, when they combated Aratus and the whole Achæan league, near a century after Philip. The Theban and Athenian gold was, it is most likely, coined after Philip had set the example, and when they were defending their liberties against him. There is but one ἡμιχρυσος of Thebes, much worn, and weighing but 59 grains, in Dr. Hunter's cabinet; and perhaps not above two or three χρυσοι, or gold didrachms, of Athens in the world; one of which is also in that collection, and weighs $132\frac{1}{2}$ grains. It has not the square usual in early Athenian coins, but every appearance of being more modern than such, which extend down to within 40 years of Philip's reign, so that it is likely that it was posterior to his coinage. And as it appears that Athens, the most considerable city in Greece, did not strike gold till he set the example; it may well be inferred that none of the rest did.

Diodorus Siculus informs us that Philip having conquered the city Crenides on the confines of Thrace, he enlarged and called it Philippi after his own name, afterward to be famous in history for the defeat of Brutus and Cassius. There

were gold mines in its neighbourhood, formerly ill-explored, and of small produce; but he so much improved them, that they produced above a thousand talents of gold yearly, or about 2,880,000*l.* of our money. From this gold he first struck the coins called *Philippi*, because of his portrait which appears on them. These coins were so numerous, as for many ages after to be frequent in the Roman empire; whence *philippi* became a name common to gold, silver, and at length to brass coins of their size*. This happened in the third year of Philip's reign, and the 358th year before Christ.

To Athenæus we are indebted for the information that gold was of extreme scarcity in Greece, even in the time of Philip. After the Phocians had plundered the temple of Delphi, and thereby given rise to the Sacred War, gold which had been valued as gems, and consecrated to decorate the temples of the gods only, began to be known among the Greeks.

Herodotus, who flourished about 440 years

* Of this impropriety examples are common in modern coinages. The papal *Julios*, and our *Guineas*, though only struck at first of Guinea gold, are instances.

before our æra, and about a century after Darius, who coined the Persian darics, values gold at 13 times its weight in silver. Plato in his Hipparchus at 12: but 10 to one seems to have been the latter and more durable valuation of gold to silver in Greece; though in Rome the plenty of silver procured from the Spanish mines, made the value of gold to be higher in silver; and there is no reason to think it was ever valued in Rome at less than 12 times its weight in silver.

The χρυσος, *gold piece, gold stater, or philippus*, is a didrachm, the form most universal in the ancient coinages of gold; and there is reason to think that it went for twenty silver drachmas on its first appearance; but in later times for 25 Greek drachmæ, or Roman denarii. Some writers gravely tell us, that upon this supposition all the *philippi* must have been sent to Rome; the exchange being so much superior. They wisely talk of the exchange between Greece and Rome; when the fact is, that Greece had nothing to exchange; nor if she had, was there any danger. Send Mr. Clarke over to Ireland, and let him bring back an answer to his arguments upon this score. Why do not all our guineas go there, where they

bear 22s. 9d.? Why not all our shillings for the twelfth part gain?

That the gold coins of Philip called *philippi* were didrachms we know from ancient authors, and from innumerable of them which yet remain: that the χρυσος, or chief gold coin of Greece, was of the same weight, is clear also from ancient authors*. Being of twenty silver drachmas, it was anciently worth 15s.; but, valuing gold now at a medial price of 4l. the ounce, it is intrinsically worth 1l. at present. The ἡμιχρυσος, or half the former, is scarce of Philip and Alexander, if it occurs at all; but there are of Hiero I. of Syracuse, and of Pyrrhus. It weighs the drachma, and passed for ten silver drachmas, or 7s. 6d.; but now worth, according to our proportion of gold to silver, 10s. The τεταρτο-χρυσος, or quarter of the *philippus*, there is of Philip, Alexander, and of Lysimachus: it weighs 33 grains, and went for five drachmæ of silver, 3s. 9d.; now worth intrinsically 5s.

* Πολεμαρχος φησι δυιασθαι τον χρυσον παρα τοις Αττικοις δραχμας δυο. Την δε του χρυσου δραχμην νομισματος αργυριου δραχμας δεκα. Hesych. ο δε χρυσος στατηρ δυο ειχε δραχμας Αττικας. Pollux.

Beside these, there are gold coins of Cyrene still more minute, and which could not have gone for more than two drachmas of silver. What was the current worth of the very ancient gold coins of Asia Minor, weighing about 40 grains at a medium, we cannot say. It may be safely supposed that they were coined with no relation to their weight as parts of the drachma, but merely to make them correspond to so many silver pieces as was found convenient.

However, we have larger gold coins than the χρυσος, or didrachm. The διχρυσος of Alexander and of Lysimachus weighs its double, or about 266 grains, and went for 40 silver drachmas, or 1*l.* 10*s.*; now worth 2*l.* Of Lysimachus, Antiochus III., and of some of the Egyptian monarchs, we have even the τετραστατηρ or quadruple χρυσος, weighing about 530 grains, and current for 80 drachmas of silver, 3*l.*; now worth 4*l.* sterling. Some weigh 540 grains, but this is perhaps owing to the gold of such being of more alloy: though indeed it may well be questioned if they were ever meant to relate to the Attic standard.

SECTION VII.

*The different Sizes, and original Value, of
Roman Coins.*

THE Roman money being that of all Europe for some centuries, and the model upon which all European coinage was originally formed, it deserves the greatest attention ; and it is hoped that the reader will therefore pardon the considerable length with which it is here treated.

As in Greece the first estimation of money was merely by weight, this was likewise the case in Rome. Silver was the metal first used in Grecian coinage, but copper in the Roman : and the former metal was long unknown to the Romans ; not being to this day, it is believed, found in any Italian mines : and Rome being for four or five centuries after her foundation merely a warlike city, without the smallest commerce.

ARTICLE I. ROMAN BRASS.

The first valuation of Roman money was by the *libra gravis aeris*, or pound of heavy brass : and, in progress of their conquests, what little silver and gold came into their hands, was regulated in the same way. Thus in the well-known story of the ransom paid to Brennus, the gold was weighing out when that barbarian added the weight of his sword to the scale, subjoining the no less weighty argument in the national scale, *Vae Victis !*

With the Romans weight continued, as with the Greeks, the usual estimation of large sums ; and as at first all money was valued in this way, it will be proper to consider these weights, and large sums, in the first instance.

The common Roman pound, yet used at Rome, consisted of twelve ounces of 458 grains each, equal to our ounce avoirdupois : but the money ounce seems to have had only 420 troy grains, or the pound 5040*. This was the standard of copper ; and when silver came to be

* Raper.

coined, seven denarii went to the ounce as in Greece eight drachms. The gold was regulated by the *scriptulum*, *scrupulum*, scruple, or third part of a denarius; and by the larger weights just mentioned.

The number Ten being, almost in every country and age, the grand divisor of sums, the Romans seem to have used it at first; but finding that it did not so justly apply to money as a smaller number, they afterward divided it into quarters. As the quarter of ten is two and a half, by a latinism, and indeed by a hellenism*, called *sestertius*, or *half the third*, to express that it was two of any weights, measures, &c. and half a third; the SESTERTIUS came to be the grand estimate of Roman money.

The as being at first the largest, and indeed the only, Roman coin, sestertius means sester-tius as, or two ases and a half. When silver was coined first, the denarius of ten ases was struck in the common and most convenient denary

* It is a general gothicism, and found in Saxon and Scandinavian: *halftridium*, half a third, is two and a half. Worm. Mon. lib, v. mon. I.

division of money; or that by tens; and the sestertius was of course two ases and a half, or quarter of the denarius. But when the denarius was ninety years afterward rated at sixteen ases, at which it continued for about three centuries after, the sestertius, though by an impropriety which has occurred in the changes of coinage in every age and country, was a name given, not in its original and proper signification to two ases and a half, but to a quarter of the denarius, or four ases. This term sestertius was applied to all sums under 1000 sestertii, or 8*l.* 6*s.* 8*d.* sterling; but to sums exceeding this, a larger mode of the sestertius was applied, though not exclusive of the former.

Money in old Rome, when rising to a high sum, was estimated not by the talent, a term unknown to the Romans, but by the hundred-weight of brass, called *pondus* by eminence. Hence came SESTERTIUM in the neuter, for the word is doubtless an adjective, which implied *sestertium pondus*, half of the third hundred-weight, or two hundred-weight and a half, to wit of brass. I believe we shall not err if we value the *as libralis* of ancient Rome at the same rate as we do the denarius of silver, that is at eight-pence English. When the as was there-

fore a pound weight, the SESTERTIUM *pondus*, or 250 pound weight, was equal to 1000 sestertii, or 8*l.* 6*s.* 8*d.*

By a coincidence, evidently the fruit of design, when the silver denarius appeared the, SESTERTIUM *centum denariorum*, or half the third hundred denarii, was just equal to the same sum of 8*l.* 6*s.* 8*d.* Indeed I am induced to think that the *sestertium* is a word unknown prior to the silver coinage of Rome, the scarcity of money before that making the *pondera gravis aeris* sufficient: and that SESTERTIUM always means, from the very first appearance of it in Roman authors, SESTERTIUM CENTUM *denariorum*. But so many writers of the deepest learning have examined this subject, without giving the least hint of this, that I tremble at the mere proposal of so new an opinion. However this be, the *pondus*, or hundred-weight of brass, was just worth 100 denarii, or a pound of silver: hence *pondus* is also understood to be a pound of silver.

This SESTERTIUM, by the easy progress observable in all languages, from an adjective, its primary form, became a substantive neuter. And as the word itself implied the same sum as

mille sestertii, the latter phrase was preferred, and *sestertium unum* occurs in no Roman writer. But *duo*, *tria*, &c. *sestertia*, are the modes of expressing all superior sums: and the sestertium being, as above noted, the same amount as *mille sestertii*, or *mille sestertiorum*; hence *duo millia*, *i. e.* *sestertiorum*, &c. are synonymous with *duo sestertia*, &c. and used as such by all Roman authors. It may be proper to add, that, by a contraction which every one knows to be common to the Latin language, *mille sestertium* is the same with *mille sestertiorum*, &c. &c. &c. being merely a Latinism to soften the sound of a long word. The sestertium being 8*l.* 6*s.* 8*d.*; ten *sestertia* (*dena sestertia*) are 83*l.* 6*s.* 8*d.*: *centum sestertia*, 883*l.* 6*s.* 8*d.* DECIES has 8333*l.* 6*s.* 8*d.*: *vicies*, 16,666*l.* 13*s.* 4*d.*: *tricies*, *quadragies*, *quinguagies*, *sexagies*, *septuagies*, *octagies*, *nonagies*, are triple, &c. the *decies*. CENTIES has 83,333*l.* 6*s.* 8*d.*: *ducenties*, *tricenties*, *quadringenties*, *quingenties*, *sexcenties*, *septingenties*, *octingenties*, *nongenties*, are in proportion. MILLIES bears 833,333*l.* 6*s.* 8*d.*: *decies millies*, 8,333,333*l.* 6*s.* 8*d.*

Having thus, it is hoped, given a clear idea of the SESTERTIUS, the only mode of calculating abstract and large sums at Rome, the real

coins become the next consideration. And as the Roman history divides itself into two grand periods, that of the commonwealth, and that of the empire, the coinage in each metal shall be first considered with regard to the former, and afterward in respect to the latter period.

Ere we consider the earliest Roman coinage, which was that of COPPER, it will be proper to follow the same plan which we have done in the Greek, by affording a few hints in relation to its origin. The states adjoining to Latium, and from which we may reasonably conclude the form of the first Roman coinage was derived, were, upon the north and west, the Etruscans; and upon the south and east, but at a great distance, the Grecian colonies in Magna Græcia and Sicily. The question is, did the Romans receive their coinage from the Etruscans, or from the Grecian colonies? I am clearly of opinion that it was from the former.

Joseph Scaliger, Gronovius, and others contend that it was to the Sicilians that the Romans were indebted for the origin of their coinage; but as I weigh no man's name, but his opinion, I must assert that these writers have no arguments that can even be called plausible to

support this sentiment. To confute it at once we need only reflect on the state of the Roman territory in the time of Servius Tullus, to whom the first Roman coinage is given by the best authorities. It did not extend to above ten miles around Rome, and was quite surrounded by the Etruscan and Latian states; the Greek colony of any consequence that was next it being Cumæ, near Neapolis, now Naples, at the distance of 150 miles. Is it most reasonable to think that the Romans received the use of money from the Etruscans and Latians, who were their neighbours; or from the Greek colonies, who were distant; and at that time, as appears from every author of Roman history, absolutely unknown to the Romans as to intercourse? If this argument is strong with regard to the nearest Grecian colonies, what must it be in respect to Sicily, an island 300 miles distant from Rome, where it was not known, at that time, if a boat went by land or water?

But, say these writers, the Sicilian coins gave origin to the Roman, because there is a similarity in them, which those of Rome must have derived from Sicily. Let us examine this similarity.

The Greek pound used in Sicily was called

λίτρα, as it was in Greece: this λίτρα was divided into 12 ουγκιαι, or ounces. The Roman word *libra* I grant to be from the Greek λίτρα; as very many of the Roman words are from the Greek; but that the as, or libra, a coin, was from a Sicilian model, I must deny. The Sicilians had, it is true, a coin called λίτρα, but it was of silver; and equal to the obolus of the Aeginean standard*, ten of which went to the Sicilian δεκαλιτρον. The Syracusans, it is well known, were the chief people of Sicily, and they were a colony from Corinth: Gronovius labours hard to prove that the standard of Aegina was used at Corinth, and of course in Syracuse; but all the Corinthian coins now remaining are upon the Attic model, which circumstance confutes at once all his arguments. And it appears from Aristotle, as quoted by Pollux, that the Sicilians had a money talent, or standard, of their own. The λίτρα, or Sicilian silver obolus, contained also, as the Roman primitive as, 12 ουγκιαι, or chalci, so called at first, because they weighed an ounce, but afterward because 12 of them went to the silver λίτρα, as 12 ounces to the

* Ἡ δὲ λίτρα δύναται ὀβολὸν Αἰγιναιον. Pollux, lib. iv. It however declined in size, as all other coins, for most of the Sicilian λίτραι do not weigh above 10 or 12 grains: the obolus of Aegina was of 18 at first, but afterward lessened as usual,

pound. The *ουγκιαι* of Hiero weigh more than a troy ounce: and the brass coins of Agri-gentum have marks upon them like the Roman parts of the as, 0,00, up to 000000, or six *ουγκιαι*: the largest only weighing 186 grains, or about one third of the primitive *ουγκια*.

I suppose that it is of the Sicilian *λιτρα*, or *libella*, that Varro speaks, when he says it was of silver; and not of the Roman *libella*, or *as*, which we may safely suppose was never struck in that metal. For after the Punic wars, of which Sicily was the grand scene, the Sicilian coins must have been frequent at Rome, and the Roman in Sicily. But the Greeks or Phœnicians, of which nations the chief towns of Sicily were colonies, never knew such coins as the *as libralis*, or any of its parts; and it is well known that the ancient colonies commonly followed the plan of their parent countries. And though it must be granted that the Sicilians had their own standard, it yet bore a resemblance of the Greek; their *λιτρα* being equal to the Aeginian obolus, and their *ἐξάλιτρα* the drachma of Aegina; and it is not to be supposed that when the Greek brass coinage was always of the most minute form, they should coin pieces of that metal weighing a pound.

Nor, to close this point at once, do I see that even the Roman silver denarius owes its origin to the Sicilian δεκαλιτρον, as many writers so strongly assert. The δεκαλιτρον, having ten λιτρα, or Aeginean oboli, would weigh about 180 grains; whereas the Roman denarii do not run above 60, or a third part. What connexion then between the two? He surely must be the bigot of a system indeed who can see any. The denary proportion, being the grand divisor of numbers, is the most natural form of coins; and it is believed examples might be brought of this from every age and country. Is our old ryal of 10s. from the Sicilian δεκαλιτρον, or from the Roman denarius?

I am convinced therefore that the Romans derived not one idea of their coinage from Sicily, but that the Sicilians had their λιτρα divided into 12 ουγκιαι, from the Etruscans; though, in the more elegant Greek plan, they made the first a small coin in silver, and never struck any brass coin larger than the ουγκια, or piece of an ounce weight; if indeed the Sicilians had not this idea of 12 ουγκιαι to the λιτρα from the Romans themselves, which is much more probable than that the Romans had it from Sicily. I intentionally reserved to this, the last place,

the strongest argument against the Roman coinage being copied from the Sicilian, which is, that, though we have innumerable Sicilian coins in every cabinet, yet not one of them resembles the Roman as *libralis*, or its early divisions, in the very smallest degree;—an argument which is conclusive. Add that in most cabinets there are Etruscan coins upon the exact scale of the as *libralis*, and of its several parts; whence it follows of course that these, and these alone, must have afforded a pattern to the primitive Roman coinage.

The Etruscans, to whom the most ancient brass coins found in Italy are known to belong, were a colony from Lydia, a country to which Herodotus ascribes the first invention of coinage. It may of course be safely supposed, that coinage was known to the Etruscans, perhaps as early as to Greece. Those colonists, upon looking round their settlements, and finding that no silver was to be had, and much less gold, the metals used for coinage in their native Lydia, were obliged to supply this mercantile medium, to which they had been accustomed, with copper. The want of other metals naturally forced them to coin this in all sizes, as has been commonly the case in Sweden so late as the last

century; and hence the vast weight of some of their coins,

All such coins, which exceed the *as libralis* in weight, are esteemed prior to the Roman coinage of *Servius Tullus**. Some occur of 53, others of 34 Roman ounces†; with the rude figure of an ox or bull upon one side, and the resemblance of the bones of a fish on the reverse. Such are most commonly found at *Tuder*, or *Tudertum* in *Umbria*, as *Passeri* informs us. Even these appear always broken at one end, so that perhaps some might be struck even of the *decussis* form, or weighing ten pounds.

Pieces of this sort are found with the names of many different towns upon them, as may be seen in *Passeri* and *Olivieri*. The more frequent are those of *Tuder*, and of *Hatria*, or *Hadria*, in *Umbria*, from the last of which the *Hadriatic* Sea takes its name. Those of *Volaterra* in *Etruria* likewise abound; and some appear marked *FAAATHRA*, which is most probably *Velitræ*

* *Passeri, Cronico Latino Numario.*

† *Olivieri della fondazione di Pesara: Si aggiunse una lettera del medesimo al Signor Abbate Barthelemy sopra le medaglie Greche di Pesaro; le piu antiche Romani; ed altre d'Italia. In Pesaro 1757, folio.*

in Latium; though Frœlich, in his *Notitia*, thinks they may be of a place now called *Felitre* in Umbria. Beside these, one or two are seen of a vast number of towns in Tuscany, and others the superior parts of Italy on the north and east of Rome, and indeed all around what little territory the Romans then had*.

These coins place it beyond a doubt that the Romans derived the model of their vast brass coins from the Etruscans, and other states around them; as indeed common sense might have told us without this blaze of evidence. They are all cast in moulds; and the greater part of them appear, *prima facie*, much more ancient than the oldest Roman ases.

But it is full time that we should now consider the first Roman coinage, or that of the as libralis, which was palpably derived from the Etruscan model. Dr. Combe, who has considered the subject of the Etruscan and Roman early coins with particular attention, has with his usual politeness communicated to me a MS†, in

* See Passerii *De Re nummaria Etruscorum Dissertatio*, 1767, folio. Ferraræ ut videtur.

† Numi antiquissimi Romanorum, et aliorum populorum

which he has delineated with his own hand all the pieces of this sort, which he could meet with either in cabinets or authors. He has prefixed a brief, but accurate and ingenious dissertation on these coins, to which I shall be obliged for some of the few remarks which shall now be offered concerning them.

The first Roman coinage, according to Pliny and other respectable authors, took place in the reign of Servius Tullus, or, according to the common calculation, about 550 years before Christ. Sir Isaac Newton, to whom on this occasion I heartily assent, cuts off 125 years from the age of Rome, placing its foundation in the 38th Olympiad: and the slow progress of their coinage is a corroborative proof of his opinion. We shall do well then to place the middle of the reign of Tullus, and the first Roman coinage, in the year 460 before our æra.

This coinage of Tullus seems to have been confined to the as, æs, or piece of brass, only; which was stamped with the two-faced head

Italiæ: præfigitur Dissertatio de hujusmodi numis a Carolo Combe, S.A.S. 1772, folio MS.

of Janus on one side, and the prow of a ship on the other; the latter symbol always attending Janus, because he arrived in Italy by sea. It is probable however that the very first Roman *ases* of Tullus had the figure of a bull, ram, or other cattle upon them, as Varro informs us they had*; and that in imitation of the Etruscan, upon the model of which they were. Suppose this continued for half a century, sudden changes in the symbols of coin seldom taking place, we may ascribe the earliest of those *ases librales* which we have, with Janus on one side, and the prow on the other, to about the year 400 before our *æra*, and afterward. However this may be, soon after the first coinage, as would appear, parts of the *as* were given in proportion of weight and value. The *semis* or half, marked S, has commonly the head of Jupiter laureated: the *triens* or third, marked o o o o, as being originally of four ounces, has the head of Minerva: the *quadrans* or quarter, o o o, the head of Hercules wrapt in the lion's skin: the *sextans* or sixth, o o, that of Mercury with a cap and wings: and the *unica*, marked o, has the head of Rome.

* Et quod *Æs* antiquissimum quod est flatum, pecore est notatum. Varro de Re Rust. l. 11. c. 1.

These coins were originally all cast as the Etruscan; which is easily perceived by the edge of them showing evidently where they were severed from each other, and where the piece at the mouth of the mould was cut off. In the British Musæum there are even four of the *ases* all united together, as taken out of the mould, in which perhaps dozens were cast at once. But in time the smaller divisions were struck, though the larger continued to be cast till the *as* fell to two ounces*.

From their being cast, it may be judged that they are not very correctly sized, a matter of little importance indeed, considering the metal. As the *as* fell in weight, however, larger denominations were coined. The *as* being latterly marked I. the *bissas*, *dupondius*, or double *as*, is marked II. the *tressis* III. the *quadrussis* IIII. Nay there are *decusses*, or pieces of ten *ases* in copper, marked X. Oli-

* After the *as* fell, it was still called *libra*, and in fines of estates, and other old customs, was still held to a pound weight of copper. See Cornutus on Persius: that annotator lived in Domitian's time. *As* was also used in accompts for *The Whole* of any heritage, &c. to late times. See Volusius Mæcianus. From *as* comes our *ace* of cards and of dice.

vieri mentions one in his own cabinet weighing upward of 25 Roman ounces, or cast when the as was about three ounces: for, as just mentioned, they are far from being correctly sized. In the *Musaeum Etruscum* is a decussis of 40 Roman ounces, or cast when the as was 4 ounces. There was also a curious decussis in the Jesuits' Library at Rome, for which one of our medallists offered 20*l.*; but it was seized by the Pope along with every thing else, when the Society of Jesuits was dissolved.

If we trust Pliny*, the as continued of a pound weight till the first Punic war, when the necessity of the Roman affairs forced the state to reduce it at once from a pound weight to two ounces. But this account, which is indeed improbable in itself, is confuted by the coins

* *Librale autem pondus æris imminutum bello Punico Primo, cum impensis Respublica non sufficeret, constitutumque ut asses sextantario pondere ferirentur. Nat. Hist. xxxiii. 13. Sextantarius pondus*, the weight of an old *sextans* was two ounces. Who will prove that the *librale pondus*, pound weight, of the as, did not continue till the First Punic war, and was lessened by degrees during that war? This seems the natural sense of Pliny's words, not that the as fell at once.

which remain: for we find ases and their parts, of all weights, from the pound downward to Pliny's two ounces*. The as must therefore have gradually diminished to ten ounces, to eight, to six, to four: and when the size was so much reduced, still more gradual diminutions must have taken place to three, to two ounces. One or two of the pieces which remain might even imply that the decrease was more slow, to eleven, to ten, to nine, &c.; but neither the *as* nor its parts were ever correctly sized, for the reasons above named of their being cast, and in copper, a metal never valued: beside in such large pieces, a great waste of metal must have happened, from their lying so long in the ground.

The middle of the First Punic war, being about the vulgar year of Rome 502, or before Christ 250, is the epoch, which we may put for the reduction of the *as* to two ounces, in consequence of Pliny's information; though perhaps the end of that war might be more just, or 12 years later. And the same author tells us that it was in the Second Punic war,

* *Supersunt enim ex omni fere pondere, ab unciis circiter duodecim, usque ad duas. Combe, ubi supra.*

when Fabius was dictator, and the Romans were sore pressed by Hannibal, that the as was further reduced to one ounce. This event is ascribed to the vulgar 537th year of Rome, or 215 before our æra: being 36 years after the former change. The as libralis, with Janus, is the most common form now found of the as, previous to its being reduced to two ounces; a circumstance which shows that form to have been of long duration: and it has been formerly hinted, that this symbol does not seem to have appeared on the first, but perhaps not till half a century after. However this may be, I suppose that the as libralis continued for at least half a century and a half after the coinage of Tullus, down to 300 years before Christ, about the vulgar year of Rome 452; between which and the year 502, the gradual diminution to two ounces must have taken place. A circumstance which would apologise for Pliny's account by the rapidity of the decline: and which might offer the following sketch of a plan to determine the age of these coins from the weight: after premising, that down to 250 years before Christ, it is only conjectural, and to be taken as such:

As libralis coined by Tullus, with the figures of oxen, &c. about 167 years after Rome was built, according to sir Isaac Newton, or before Christ	460
As libralis with Janus and prow	400
The as of Ten ounces before Christ	300
Eight	290
Six	280
Four	270
Three	260
Two, according to Pliny	250
One, also from Pliny	214

Pliny afterward informs us that the as was reduced to half an ounce by the Papyrian Law; which is supposed to have past when Papyrius Turdus was tribune of the people, about 175 years before Christ. At which weight it continued till Pliny's time, and long after.

Before we leave the copper coinage of the Republic, it will be proper to add that, when the Romans began by intercourse with Greece to imbibe the arts of elegance, a variety of types appear upon the parts of the as, and at length upon the as itself. These types which were afterward to form the great amusement of the medallist, do not, it is believed, appear

upon the as itself, till near the time of Sylla. There is a supposed as with the head of Janus, reverse a Victory CN. BLASIO. N. F. which weighs 2 ounces: Vaillant ascribes it to be about the year of Rome 483, or 269 before Christ: but all these dates are conjecture, and we here know from Pliny's account that he is wrong. In the family Marcia is another with the heads of Numa and Ancus, reverse a Victory in a porch, and prow of a ship before her. An as of L. Murena has the head of Janus, but a Victory for reverse: another has the common reverse. He lived in Sylla's time as medallists think: this would fix the time of that alteration to this very period. It was introduced by giving the usual reverse of a prow, but with a Victory or other figure standing on it: some have a horse, some a cock, &c. as may be seen in Morell. The parts of the as are distinguished with variety of symbols, as soon as the silver denarii, at first limited to the head of Rome, and Castor and Pollux, or chariot of Victory, began to admit of them; which seems to have been about the time of Marius and Sylla, or at most a century before Cæsar.

Dupondii, or double ases, were also coined in the later period of the commonwealth, as

in the former; together with the sestertii ærei, which came in place of the quadrusses, when the denarius began to be rated at sixteen ases; which it is reasonable to suppose was when the as fell to half an ounce.

It must also be observed that the Romans, in some instances, accommodated their coins to the country in which their army was stationed. Thus we have pieces marked ROMAN. and ROMANO, which by the fabric are evidently coined in Magna Græcia, or Sicily; and are upon the Greek, not the Roman scale. It is from the coins struck at Rome only, that the modes of Roman coinage can be adjusted. In the later period of the Republic, the types also began to vary, so that we have a brass coin, thought to be struck by Sextus Pompeius in Sicily, with GN. MAGN. IMP. which has a double head of Pompey upon it, resembling a Janus. But if it be not a coin of the then Sicilian standard, it is a dupondius, as may be judged from its being of copper, and yet weighing an ounce: and as indeed seems implied by the *double* head of Pompey. The prow of a ship is also a reverse of dupondii of Cæsar.

To proceed to the *imperial* coinage of copper,

we shall begin with the largest imperial brass coin, which was the sestertius, a piece worth two-pence English. All writers on ancient money or on medals, from Budæus and Vico, down to this hour, imagine the sestertius to have been always, as at first, a silver coin: but in fact it would be as rational in any antiquary a thousand years hence, to contend that our halfpenny and farthing are now of silver, because they were so in the reign of Henry VIII. Pliny first opened my eyes, as he must those of every body. Hear his words in speaking of the *orichalcum*, or yellow brass: *Summa gloria (aeris) nunc in Marianum conversa, quod et Cordubense dicitur. Hoc a Liviano cadmiam maxime sorbet, et orichalci bonitatem imitatur in SESTERTIIS, DUPONDIARIIS que, Cyprio suo ASSIBUS contentis.* lib. XXXIV. C. 2.—that is literally, “The greatest glory of brass is now “ due to the Marian, also called that of Cordova. This, after the Livian, most absorbs “ the zink, and imitates the goodness of native “ orichalcum in our SESTERTII and DUPONDIARII, the ases being contented with “ their own copper.” This clear passage all the commentators agree to be found in every manuscript, without the slightest variation whatever. Gronovius, who asserts the sestertius

never to have been a brass coin, confesses that the place burns and torments him; and gives it up in despair*.

The Livian mine, mentioned by Pliny, is thought to have received its name from Livia, the wife of Augustus; and I suppose these pieces with her portrait as IVSTITIA, SALVS, PIETAS, to be *dupondii* from this very mine; the metal being remarkably beautiful, and of that kind called Corinthian brass by the early medallists. Perhaps the mine received its name from this very circumstance of her coins being struck in the metal taken from it.

However this may be, every one knows that no change, in the Roman brass coinage, took place from the time that the as fell to half an ounce, to the days of Pliny. And I am apt to think that, before the time of the first Cæsar, yellow brass began to be used in the Roman coinage; and that it was always considered as double in value to the Cyprian or copper.

Very few coins in large brass immediately

* Urit me fateor his locus....Quid dicam? hæreo. Gro-
nov. de Pecun. vet. p. 529. edit. 1656.

prior to Julius, or of that emperor, exist: but certain it is, that upon the most accurate examination of innumerable coins, from Augustus downward, I have ever found that the large brass were all of the yellow sort, and not one of them copper. The largest of what are called the middle size, are likewise all of yellow brass: and the next size, which is the as, or weighs the half ounce, is universally copper. The coins and Pliny thus agreeing so remarkably together, may establish the matter beyond all doubt, even to those who are sceptics in these matters.

Every one, the least versed in Pliny and other ancient authors, must know that *orichalcum*, or what we term brass, was by the ancients held in far superior esteem to copper, or the *aes cyprium* *. Very few mines of native orichalcum were found; as such indeed were probably owing solely to the singular circumstance of copper ore, and zink, or lapis calaminaris, being found in one mine. And the art of making brass with the *lapis calaminaris* was not well understood by the ancients,

* Procop. de ædificiis Justiniani, lib. 1. c. 2, speaking of a statue of Justinian, says, "That brass, inferior to gold in colour, is almost equal to silver in value."

but cost them considerable trouble and expense. Hence the metal was valued in commerce at just double its weight in copper: the latter being a metal anciently applied to the meanest uses before even iron was invented; and being found plentifully in every country, was of course very little esteemed. Indeed it is wonderful that medallists should think of giving 16 of these fine large coins, of the best fabric, to such a bit of silver as the denarius; while 4 would be its real value,

It is also surprising that medallists have not attended to the circumstance of all the large brass coins being of yellow metal: and the middle brass yellow, or red; but the former always of the finest workmanship. The rust which time brings over both metals, has confounded them together, and our putting little more value on brass than on copper has confirmed the deceit. Whereas the ancients put double the value on brass that they put on copper; and any one may reflect that, when the pieces were first issued, the difference between copper and brass was as apparent to the eye, as that between silver and gold. But it is desired that the reader will not take the large brass for copper, because they sometimes have now a copper

hue: before he can decide, he must always scrape the side of the medal. And by this he will learn that the ancient coinages of brass and of copper were kept as distinct as those of gold and silver.

As this discovery of the imperial sestertius being in brass is quite new, I must be allowed to bring forward full proof of it; for it does not rest upon the testimony of Pliny and the coins alone, though that were irrefragable; but can be supported by the strongest collateral evidence of other authors.

Julius Africanus, who wrote the *Ιατρικα*, or Treatise on Medicine, has the following passage, as quoted by Savot, and by Gronovius: *Denarius autem apud Romanos habet quinarios duos; nummos, sestertiosve, quatuor; assaria vero, seu asses, sex et decem. Nummus vero pondere unciam habet.* Hence it is clear the nummus or sestertius weighed an ounce: it of course could not be silver but brass. The large imperial brass coins all weigh the Roman ounce. This demonstration being quite mathematical, let us add the Q. E. D. The work of Africanus must only exist in manuscript, for Gronovius received the extract from a friend, though

Savot had half a century before quoted it from that MS. Fabricius, in his *Bibliotheca Latina*, says nothing of him; nor indeed of Balbus Mensor, nor of Volusius Mæcianus, whose works were published by Gronovius, which is a most strange and ignorant neglect. Of the age of Africanus we know nothing: but as he makes the denarius contain 16 ases, he must have been prior to Gallienus when it had 60*.

The authors, whose fragments on weights and measures are published at the end of *Stephani Thesaurus Linguae Graecae*, give the same light. Hero, who cannot have been the Alexandrinus said to have flourished in the time of Alexander the Great, but a much later, says, Το δηναριον παρα Ρομαιους εχει νομμους δ. ασσαρια ις. Ὁ δε νομμος ουγκιαν εχει τω σταθμω: that is, 'the Roman denarius has 4 *nummi* (sestertii), 16 ases. The nummus has in weight one ounce.' An anonymous writer, quoted by Gronovius, *De Pecuniis*

* Gronovius suspects this Julius Africanus to be him mentioned by Eusebius. Upon looking into Eusebius, I find he takes notice of a Julius Africanus, who wrote a work of chronology, and who lived in the time of Elagabalus: perhaps it is the same. Eus. Chron. *Burd.* 1604. *folio*, p. 176.

nia vetere, lib. III. c. 10, says, Νομμος οὐγκία α, that is the nummus, or sestertius, weighs one ounce. All these authorities corroborate the mathematical demonstration from Africanus, above given; and seem to place the matter beyond all doubt.

Indeed I do not believe that the sestertius was ever called nummus, or *the coin*, by way of eminence; which every one knows is its common name in Latin writers, till it was the largest brass coin. Had any synonymous term been given it in its silver state, it must have been *nummulus* or *nummusculus*, though I believe in the latter I *coin* a word: for in fact no diminutive can sufficiently express its smallness.

That the sestertius of the imperial times weighed an ounce struck Salmasius, a writer of the most profound learning, so forcibly, that he pronounces that man a blockhead and ignoramus who does not know that the Roman *as* or *assarion* of the early and middle emperors weighed a quarter of an ounce, as four of them, every body knows, went to the ounce. That the sestertius weighed an ounce he is right; but that the *as* of consequence weighed a quarter of an ounce he is wrong: for it was

coined in a different metal, of only half the value of that in which the sestertius was struck. Beside, as Gronovius very justly observes, had any further diminution taken place in the as before Pliny's time, he would doubtless have mentioned it; and every one who has seen one series of Roman coins knows that no diminution or alteration took place till long after the days of Pliny*.

The whole writers of the Augustan age, by calling the sestertius, *nummus*, hold it out as a large coin, and at the head of its metal; as the denarius was called *nummus* from its being at the head of the silver; and in later times the aureus, *numisma*, from its standing as the leader of the gold. Afterward, in the *Historiæ Augustæ Scriptores* rescripts of several

* In another place Salmasius says, "Asses intelligendi
 " qui sub imperatoribus primis in usu fuere, quorum qua-
 " terni unciam efficiebant: unde τετρασσαριον, hoc est ses-
 " tertius æreus qui quatuor assibus valebat, uncix pondus
 " habere dicitur apud Cleopatram." *Adversus Cercoetium*.
 And in another place: "Sestertius porro æneus uncialis
 " fuit; et quatuor assibus valebat. Assem Romanum, sub
 " primis et mediis imperatoribus, quartam uncix partem
 " appendisse, notius est quam ab pluribus probari debeat."
Confutatio altera adv. Cercoet. He argues solely from the
 certain fact that the sestertius weighed an ounce.

emperors appear, in which the *sestertii* are called *aerei*; or the phrases *in aere H. S. &c.* are used. I could produce many other proofs from inscriptions, &c. of the sestertius being in brass, but contract my evidence for the sake of brevity.

No sensible diminution takes place in the sestertius till the reign of Alexander Severus, when it has lost upward of one sixth of its weight. In the time of the Philippi it is yet more reduced; and under Trajanus Decius, it has lost nearly half its weight of an ounce. He was the first prince who seems to have coined double sestertii, or quinarii of brass, for such are the common medallions inscribed FELICITAS SAECVLI, or VICTORIA AVG. which just weigh double his sestertii; and little more than the sestertii of the early emperors. From Trebonianus Gallus, down to Gallienus, when the first brass ceases, the sestertius does not weigh above one third of an ounce: any larger are double sestertii, like those of Trajanus Decius; or else medallions struck upon uncommon occasions. After Gallienus, the sestertius totally vanishes.

Under Valerian and Gallienus, joint em-

perors, a new coinage appears, which being intended in some degree to supply the want of the sestertius, then getting extremely small, must be mentioned here. Imperial rescripts of Valerian first use quite a new term in coinage, that of *denarii aeris*, or *philippeï aeris*: this implies palpably that a new coin had now arisen. Look into cabinets, and you will find quite a new set of coins begin with him and Gallienus; those of copper washed with silver. These coins are just the size of the denarius: need any other proof be offered that these are the *denarii*, or *philippeï aeris*?

However, they have hitherto puzzled all the medallists, who, to get rid of their embarrassment at once and without trouble, call them silver coinage of that period. But there is also silver of that period, as good as that of any reign since Severus; nay these pieces appear of reigns in which the best silver was coined, as those of Diocletian, Constantius Chlorus, the Maximians, Constantine I. Is it likely that silver coins, and copper coins washed with a little silver, were, because of one size, of equal value, in the same state, at the same time? But this opinion is too absurd to need a confutation.

have weighed half an ounce, as the *follis* of the lower empire. I suspect that Diocletian intended that it should supply the place of the *denarius aereus*: that of course it was worth 10 assaria, and six of them went to the denarius of silver. The *assarion* becomes now a very diminutive coin, not above 30 grains in weight, so that 10 of them should go to a piece of half an ounce, is not to be wondered at. Certain it is, that soon after the *follis* appeared, the *denarius aereus* was dropt for ever, which strongly implies that the former was meant to supply the place of the latter. The *follis* however assumed the place of the *denarius æreus* by degrees: and as would seem some mints retained the use of the latter longer than others. And in some the change was preceded, and gradually brought in, by washing the *follis* with silver, or with tin, as the *denarius æreus* had been. For pieces of half an ounce occur, washed in this way, of Diocletian, Maximian I. and II., and Constantius I.; that is, for about ten years, or so, after the *follis*, as would seem, first appeared. It must be borne in mind that, at this time, several cities, Carthage, Alexandria, Antioch, Rome, Lyons, Triers, London, struck imperial Latin coins of similar fabric on the whole, yet varying a little in size, as circumstances

required; and we can hardly expect the very same mode of coins in Carthage and London, in Antioch and Lyons. Hence some variations arise: one country retaining the *denarius aereus* while another has the *follis*, and another a medium between them, or the *follis* washed in imitation of the *denarius aereus*. Commerce had nothing to do with copper coinage; and therefore one standard was by no means necessary.

Constantine I. having, toward the end of his reign, introduced quite a new coinage in every point, through the whole empire, the *follis* had also its change, though the name remained to the last notices we have of the Byzantine money. His *follis*, we know, was of half an ounce, and 24 went to the *miliarensis* or largest silver coin*. It may not be improper to observe, before we leave the *follis*, that this word also means a *purse*, in which sense it likewise appears in the Byzantine history. By a law of Constantine I. every man of property paid to the state a *follis* or purse, in proportion to his income. The common *follis of silver*, when it

* Χρη γινώσκειν ὅτι τὸ ἐν Κερατίον φολλεις εἰσι IB. ἤτοι μιλιαρεσίου τὸ ἡμισυ. τὰ ἐν IB κερατία ἐστὶ νομισματοσ ἡμισυ. τὸ δὲ ἀκεραίου νομισμα εἷχει μιλιαρεσία IB, ἤτοι κερατία ΚΔ. Schol. in lib. xxiii. Basilicwn.

occurs by itself, means a purse of 250 miliarenses, as the sestertium was 250 denarii*. The fashion of counting by purses, it is well known, continues in Turkey to this day.

Having thus traced the progress of the largest form of the imperial brass coin of Rome, from its first appearance as the sestertius to its extinction as the follis, the discussion of the inferior sizes will be attended with little difficulty.

The dupondius being half the sestertius, and worth one penny sterling, was the next in value, and therefore deserves the next notice. Prior to Augustus, and before the *orichalcum* or yellow brass appeared in the Roman coinage so generally as after, it seems commonly to have been struck in copper just double the size of the as. There are indeed dupondii of Julius in yellow brass, weighing half an ounce, with a head of Venus Victrix on one side, and CAESAR DICT. TER.: reverse a female figure, with serpents at her feet, C. CLOVI. PRAEF: others have a victory on reverse, with Q. OPPIVS PR. From

* Epiphanius tell us this follis was *κατα δηναρισμον* and *κατα αργυρισμον*: that is estimated either in denarii, or uncoined metal.

the time of Augustus the dupondius was struck in yellow brass; as Pliny informs us it was in his time, and we know that no change took place between that and the Augustan age. When this mode first began, the word *dupondiarus*, used by Pliny, seems to have been adopted, expressive that the coin was not dupondius, or double the weight of the as, but of a *dupondary* value. Though indeed the word dupondius was never confined in its literal acceptance to *double weight*, for Vitruvius and Varro use it as *double length*, or *measure*, in the instance of *dupondius pes*, that is two feet and the like. Hence in the imperial times, it did not mean a coin of double the weight of the as, but of double the value. And to expect that the strictest language should be kept up, when changes of coinage take place, were ridiculous. Who imagines that our silver penny should weigh a penny-weight? or that our copper *halfpenny* should weigh half the silver penny? yet it were fully as absurd to expect that the Roman dupondius, or dupondiarus, should weigh double the as, when it was struck in a metal, which the Romans esteemed of double the value. Equal improprieties, if they can be called such, occur in the *denarius*, or piece of ten ases, which in fact went for 16; in the *quinarius* of eight, and in the *sestertius* of four ases. But he

must be ignorant of the progress of coinage in every country, and in all ages of the world, who can demur upon this score; when it has been proved above, that the sestertius weighed an ounce; and the dupondius, every body knows, was its half: the as being of copper as we are told by Pliny; and it being inferred, if not proved, from him and the whole coins that remain, that it stood at half an ounce also; till the gradual decline of the sestertius, hardly perceivable till the time of Alexander Severus, brought the as along with it.

The dupondius being always half the sestertius, and keeping pace with it through all its stages, I need not attend its progress. It was one of the most common coins in the Roman empire, and the word always in every body's mouth, uncommon as it is now to ours*. Even in the Byzantine empire, it seems to have been common. There is a law of Justinian against those who called young students of the law

* Petronius Arbitrator says, "Sed præter unum dupondium, sicilicumque, quibus cicer lupinosque destinaveramus mercari, nihil ad manum erat." The sicilicus was the 48th part of the as libralis, and of account; the *semis* of the half ounce as, of the time of Nero and Petronius. *Sicilicus quod semuncium secet.* Fest.

dupondii; but it is not known what gave rise to this appellation.

The dupondius, though of the same size with the as, is commonly of far finer workmanship, as its metal was esteemed superior in value. The sestertius and it continue to be of yellow brass, to the termination of the sestertius under Gallienus; and the as is always of copper.

The imperial as, or *assarium*, worth one half-penny English, is the next coin to be considered. It began to be called assarium as soon as its size was reduced to half an ounce, for Varro uses that word; which is indeed a Greek diminutive; as the *οδαρια* of Anacreon are little *οδαι*. The first imperial assarium was of half an ounce, and was always struck in copper, as we have seen from Pliny. It regularly attends the dupondius in size; and declines till, in the end of the reign of Gallienus, it becomes what is called small brass, only weighing about the eighth part of an ounce. From this it gradually diminished still more in the time of Diocletian, being about twenty to an ounce; and in that of Justinian, being, as Byzantine writers inform us, the same with *λεπτα*, or the smallest coins save the *νομια*. The coins of Helena, the wife of Julian II.,

with FL. IVL. HELENA AVG. and the noted coin APOLINI SANCTO GENIO ANTIOCHENI seem assaria of the period. I mention these merely to point out the size in coins so known, and which do not occur in any other form. They weigh about 20 grains, or $2\frac{1}{4}$ to the ounce; which is double the νοῦμια, or very smallest coins, which do not exceed 10 grains*. See the coin of Maria in Plate II.

The parts of the as are in the imperial times very rare in cabinets, generally speaking. Indeed, the imperial as not being but a halfpenny of our money, it is no wonder that its portions were seldom struck. However of Nero there are the semis, triens, quadrans, sextans, and uncia, being all the parts; and of Domitian there are the same. And these emperors are the only ones of whom the portions of the as are esteemed quite common by medallists; but the fact is, they impute to these emperors all those small brass coins which have no emperor's name. Now it is not to be supposed that the name or bust of the emperor should often appear upon

* The Greek assarion kept pace with the Roman. *See tables of the decline of the assaria of Chios or Scio in Monaldi's *Instituzione Antiquario Numismatica*.

coins so insignificant, in respect of their currency ; and I believe that down to Pertinax, the small brass might be looked upon as equally common of all the emperors, had not the moneyers omitted their bust and names, where they thought no honour could arise to the monarch from being commemorated.

From Pertinax down to Gallienus there is no small brass, save of Trajanus Decius. With Gallienus, it becomes extremely common. Coins of small brass, as those in large, have always the S. C. down to Gallienus: any that want this, are forgeries of ancient times, and were plated with silver, though that may have worn off. From this rule must however be excepted the common small brass of Augustus, with his head on one side, and numbers I. II. III. &c. on the reverse; the *spintriæ* of Tiberius; and a few other instances which were never meant as currency. We must also beware of arranging, as parts of the as, the small pieces struck for the slaves during the Saturnalia: as that with the head of an old woman and S. C. on the reverse, and others. The S. C. upon such Baudelot well explains *Saturni Consulto*; and they were struck in ridicule of the state coins, as the slaves had then every privilege of irony.

Their odd devices always sufficiently distinguish them. Others of the small brass are counters of the ancients, struck for their domestic games; as that with four dyes, QVI LVDET ARRAM DET QVOD SATIS SIT, and the like. This class has hitherto totally escaped our medallists.

From Pertinax down to Gallienus the sester-tius diminishes so fast, that it is no wonder that no parts of the as were struck; the as itself getting so small. Trajanus Decius, who is the only prince of whom a coin or two occur which went for the semis of the time, affected the ancient manners much in every thing, was particularly attentive to the senate, and indeed seems in every point to have been a great and good prince. That the decline of the coinage therefore engaged his particular attention is not to be wondered at; and that alterations were proposed, is evident from his double sestertius, and from his semis.

Under Gallienus, the small brass coins are *assaria*, as shewn above; 60 of which went to the silver denarius. These *assaria* are about the size of the denarius: and a few occur of Carus and his family, of half that size; which seem to be struck toward the end of his reign, when

the *assarion* was diminishing to still a less size. Some of these very small coins would seem however to have been struck in all ages of the empire, to scatter among the people on solemn occasions. This is evident from their types of palm branches with IO, IO TRIVMPHE, consecrations, and the like. Indeed I take them to have been the *missilia* of the ancients, though medallists think these were medallions: but if so, they were doubtless called *missilia a non mittendo*; for it were odd if fine medallions had been scattered among the mob. It is a common custom just now to strike counters to scatter among the populace on such occasions, while medals are given to peers of the kingdom; and we may very justly reason from analogy on this occasion.

In the Constantinopolitan empire still smaller coins were struck. The *assarion* or *lepton* being of about 20 grains in weight; the *νοῦμίου*, which was its half, does not weigh above 10 grains; being the size of the farthing tokens of James I. These *noumia*, from their extreme smallness, are very scarce: a very fine one of Theodosius II., in my possession, has the emperor's head in profile, THEODOSIVS P. F. AV.: reverse a wreath, with VOT. XX. MVLT. XXX. in the centre.

But the follis being the chief copper coin of the lower empire, it may be proper to consider its divisions. Its half and quarter seem to have been called *ἡμισυφολεος* and *τεταρτον*: the last in particular, Du Cange informs us, was a small brass coin, which leads me to suppose the other. And, so far as can be learned from the imperfect hints of writers of that age, the following appears to me the state of the Byzantine brass coins; The follis had 2 *ἡμισυφολεα*: 4 tetarta or quarters: 8 oboli: 16 assaria or lepta: 32 noumia; but in account 40 noumia went to the follis.

The follis was only worth one halfpenny English; the rest may be easily calculated, if they deserve it.

I know that it is a common opinion that the largest brass coin, or follis, of the lower empire had 40 small coins, expressed by the Greek numeral M upon it: the next, or three quarters Λ, or 30: the half K or 20, and the quarter I or 10. I have three coins of Anastasius all marked M in large; one of which weighs more than half an ounce; the second 40 grains less; and the third only 160 grains, or one third of an ounce. The sizes are beside so unequal, that the last, which is very thick,

does not appear above half the first*. So that the follis must have been rising in size as silver got scarcer: if we do not give another interpretation to these letters, which form the sole sweet reverses of the Byzantine money. Mr. Clarke thinks it a wonderful thing, when he tells us that the Byzantine brass coins were so small, that of the lowest of them 6000 might go to the golden solidus; and that some of them were not worth, in currency, one-tenth of a farthing. He might have told us that of the noumia, as is plain from the coins themselves, 19,200 went to a gold solidus, and they went not for above one-twentieth of a farthing.

* There are pieces of Justinian, &c. marked M. which weigh one ounce. The size of copper was increased, as silver got scarcer. Mr. Raper values the follis at an ounce, but does not seem to recollect that in copper no coinage, save the ancient Roman and Etruscan, ever came up to the intrinsic value. Our own coinage is not one half of the intrinsic value: our halfpenny not being worth above a farthing as to value of metal. He argues from the laws which order a solidus to be paid for 120 *pounds of copper*.

Constantius II. from his long reign, had a great number of medallions struck; but there is no other copper larger than the half ounce, save that of Anastasius, when the follis began to be struck larger, of Justin, Justinian, and Tiberius Constantinus. Others are medallions, as all medallists allow.

It may be proper to observe, before leaving this part of my subject, that the metal used in the parts of the *assarion*, or in the small brass coins, is, as may be supposed, very little attended to by the ancients. In those of the first emperors yellow brass is sometimes employed, but it is always of a refuse, or bad kind; as in the semis of Nero, for instance, GENIO AVGVSTI. But copper is the general metal used in parts of the as, from the earliest times down to the latest: and if sometimes brass be employed, it is never such as appears in the sestertii, and dupondiarii, which is very fine and beautiful; but only the refuse. Yellow brass of the right sort seems to have totally ceased in the Roman coinage, with the sestertius, under Gallienus; though a few small coins of very bad metal, of that hue, appear so late as Julian II.

ARTICLE II. ROMAN SILVER.

But it is high time to pass to the SILVER coinage of Rome. This, we know from Pliny, took place only in what, by the common reckoning, is the 485th year of Rome; or 266 before our æra. The coins confirm this ac-

count of Pliny, not one being yet found which bears the slightest marks of more remote antiquity. Varro talks of silver being coined by Servius Tullus, and of the *libella* being once in silver*; but he must have been very ignorant of the coinage of his country: and he takes the *λίτρα* of Sicily, current at Rome after the Punic wars carried on in that island, for Roman coins, as the very ancient had no names of towns, but only *pecudes*, or similar types like the old Roman money, as we may judge from those *λίτρα* which now remain. This misled him as to the *libella*; but of the *simbella*, or half the as, and the *teruncius*, or its quarter, being once in silver, he says not one word: though inattentive writers have asserted that he did.

* Nummi denarii decuma *libella*, quod libram pondo as valebat, et erat ex argento parva. *Sembella* quod sit *libellæ* dimidium, quod *semis assis*. *Teruncius*, a tribus unciiis, *sembellæ* quod valet dimidium, et est quarta pars sicut *quadrans assis*. De ling. lat. lib. iv. There is not a word here of the *sembella* and *teruncius* being in silver, the *quod semis assis*, and *sicut quadrans assis*, are only tautological phrases to give perfect precision to his meaning. But supposing the *teruncius* struck in silver, is no argument against the *denarius* being of common size, 60 grains: the *teruncius* would have been $1\frac{1}{2}$ grain, and there were Athenian coins as small.

Indeed, through the whole of this work, I have found more and more the absolute necessity of consulting the original authors; for writers on this subject often make false quotations, and ascribe any meaning to them that will serve their own schemes. That Varro was quite ignorant of the coinage of his country, though an antiquary, is no wonder, for Pliny, though a writer of infinitely better information, often makes mistakes, in points much precedent to his own time, and personal notice. The ignorance shown, of this particular subject, by modern writers of the first talents and learning, is most amazing. Erasmus, who had been in England for some time, talks of leaden money being used here! Not even a leaden token was struck in the reign of Henry VIII. Yet his authority has been followed with due reverence to so eminent a name; for how could Erasmus, who must have seen the matter with his own eyes, assert a direct falsehood? To give a later instance in a writer of reputation, Mr. Hume, in Vol. VI. of his History, p. 186, ed. 1782, 8vo. has these words in treating of the reign of James I. “ It appears that
“ copper halfpence and farthings began to be
“ coined in this reign. Tradesmen had com-
“ monly carried on their retail business chiefly

“ by means of leaden tokens. The small silver penny was soon lost, and at this time “ was no where to be found.” How many errors are here! Copper halfpence and farthings were not struck till Charles II. 1672: there were small *tokens* for *farthings* struck in copper by James I., but not one for the halfpenny. The silver farthings had ceased with Edward VI., but the silver halfpence continued the sole coins till Charles II. It was by *copper* tokens that small business was carried on. The silver penny was much used to the end of the reign of George I., and so far from being no where to be found, is superabundant of every reign, since that period, not excepting even the present of George III. From these instances the reader may judge how strangely writers of all ages blunder, when treating a subject of which they are quite ignorant.

Varro's mistake has led Bouteroue into something more absurd than absurdity itself. For he tells us gravely that, though the coins mentioned by Varro were never seen, yet he will condescend to give his readers a treat, by presenting them with prints of the very earliest Roman silver coins. So he gives us the denarius of an ounce, and the rest in proportion;

for he says that Varro's libella must have 50 grains at least; that the *téruncius*, which was its quarter, might be coined, and it could not be in less than 12 grains! Good man, he knew not of ancient coins of $1\frac{1}{2}$ grain! But Varro speaks of none being in silver but the libella; and even in this he was quite mistaken. These deplorable reveries of Bouteroue are mentioned as the strongest instance of the weakness of human judgment, that is to be found in any medallie work; though God knows some of them are weak enough. They call to mind the trite tale of an Oxford student, who was showing the curiosities in his college to some company, and, among others, produced the sword which Balaam killed his ass with. "Sir," says one, "the Scripture says only that he wished for a sword." "True," replies he, "and this is the very sword he wished for."

The account of Pliny, which is confirmed by Livy*, and, what is most important, by the coins themselves, fixes the first silver coinage at Rome to the year 266 before Christ. We might be led to think of course that the very first denarii which issued from the Roman

* Lib. xv. epit.

mint should be known to medallists. One* has indeed told us, that the denarius marked EX A. PV. C. FABI. C. F. is the very first; the EX A. PV. meaning *Ex argento publico*; an inscription upon no other, and which implies that this was the first coinage of that metal at Rome. That this is a *non sequitur* is apparent to every reader. Beside every one knows that the most ancient denarii are those on which no inscription, save the word ROMA, appears; this is evident from the coins, not to mention the natural progress of money, which is always without inscription, or with a very short one, in its first stage.

It is among these denarii then, which have only the ROMA, that we must look for the first coinage; and I suspect that if we give this honour to those of quite a different make from the rest, with a double female head on one side; reverse, Jupiter in a car with Victory holding the reins, and the word ROMA indented in a rude and singular manner, we shall not be far in the wrong. The double female head seems that of Rome, in imitation of the Janus then upon the *as*. There are fifteen of these in

* Molinet Cabinet de S. Genevieve. Paris, 1692. folio.

Dr. Hunter's cabinet, under the family *Fonteia*, though Morel with more propriety gives them among the *Incerti*: one of the largest, and these seem the oldest, weighs $98\frac{3}{4}$ grains, a second 95, a third 92, some 90 down to 84; others smaller, and more modern, weigh 58 or 59 grains, so cannot be *quinarii* of the former, as their types indeed, which are the very same with the large, show. Many reasons induce me to think, that the large ones are of the very first Roman coinage, and struck during those sixteen years, or so, which intervened between the first silver coinage, and the as of two ounces. For if we suppose, as we may with great justice, that the as was three ounces in weight, when the first silver coinage took place, the reduction of the last of these pieces, from about 90 to about 60 grains, would just answer that diminution of one third in the as. The indentation of the word ROMA strikes me as a mark of antiquity, for such a mode is hardly known in any other ancient coins, save those of Caulonia, Crotona, and other towns in Italy, all allowed to be struck at least 400 years before Christ. These remarkable large denarii are not double denarii, as shown above: they must therefore have been struck prior to the small, as is the natural progress of money. Trajan thought them re-

markable, for Neuman has published one of them restored by that prince, with the indentation of ROMA carefully observed: to this he could not be induced by any regard to the family of which the curator who struck them was, for no name appears on them: he must have regarded them as most memorable and remarkable coins.

However this may be, we know that the first denarius went for ten ases, whence it had its name. Pliny tells us the as was then *libralis*, but he is mistaken, as formerly shown. It was of three ounces; and allowing, as is most probable, that these large denarii of 90 grains at a medium are of the first coinage, the proportion of copper to silver was as 1 to 160. Afterward, when the denarius was of 60 grains at a medium, and the as of 2 ounces, copper was still to silver 1 to 160; but when the as fell to only an ounce, copper was to silver as 1 to 80; and when it fell to half an ounce, and 16 went to the denarius, it was as 1 to 64, at which rate it remained. With us copper to silver is in coinage 1 to 40, but in actual value 1 to 72. The denarius was worth 8*d.* of our money, the quinarius 4*d.*, and the sestertius, whether silver or brass, 2*d.*

As the Saxon penny continued the sole coin in England for near 800 years, before any larger form appeared, so in Rome the *denarius*, which was the father of our penny, was the chief silver coin for near 600, or from its first appearance till the reign of Constantine I. It is proper therefore to be particular in its size and standard. Celsus informs us, that seven denarii were reckoned to the Roman ounce, which in metals seems not to have exceeded 430 grains troy: the mean size of all the denarii we have does not exceed 60 grains, which would give an ounce of only 420 grains. But this Essay not meaning to treat of the Roman weights, this is of little consequence. It shall only be observed on this point, that the medium of the Greek drachm is 66 grains, which gives an ounce of 528; and if argued from, upon the principles of common sense, would prove the Greek money pound to have exceeded the Roman by a whole fifth part. However, the small difference of 6 grains in each coin was so unimportant as to make no odds in currency; and we find accordingly that they went for each other, the disadvantage of exchange lying naturally against Greece, as a vanquished state. Seven denarii to the ounce give 84 to the Roman pound in weight; but the Roman pound in tale

exceeded it, in like manner as our pound in tale falls short of our pound in weight, this being arbitrary, like other effects of custom: the Roman pound in tale consisted of 100 denarii.

The denarius went at first for 10 ases, and was in consequence marked X. It was afterward raised to 16, and though we are not told what year this change took place, it is yet very rational to infer that it was when the as fell to half an ounce, or about 175 years before Christ. Some occur with XVI, but in fact others, as may be seen in the family Calpurnia, with every number possible upon them from I to LXX or LXXX; nay, in the Crepusia up to CCCCLXXVI. What is the meaning of these numbers is quite unknown. Havercamp says they are the numbers of the dyes; and they are certainly mint marks of some kind or other: for we have others with all the letters of the alphabet, and others again with all sorts of animals, &c., in the way of the marks anciently used in our mints. But this is of no moment, for we know that the denarius always went for 16 ases, after it was raised, till the time of Gallienus. Tacitus*, in the first

* *Denis in diem assibus animam et corpus aestimari. — Ut singulos denarios mererent... An praetorias cohortes quæ binos denarios acceperint.. plus periculorum suscipere?*

book of his Annals, tells us that the mutinous soldiers in Pannonia wanted, instead of 10 ases, to receive a denarius. This was in the reign of Augustus: and Volusius Mæcianns, who lived under Antoninus Pius, tells us, that the denarius had then 16 ases. Julius Africanus, who seems cotemporary with Elagabalus, gives the same number. So that 16 ases or assaria, 8 dupondii, 4 brass sestertii, 2 silver *quinarii*, always constitute the imperial denarius till the time of Gallienus.

However, under Caracalla, if we judge from the coins, but more probably under his predecessor, Severus, who first debased the silver

And afterward, Ut denarius diurnum stipendium foret; ne veterani sub vexillo haberentur. Ann. Lib. i. § 17, 28. Some medallists have gratified these poor soldiers at once, by making 10 ases an imperial denarius. The soldier's pay was 5 ases a day till Julius raised it to 10. Polybius puts 5 ases as the pay of a Roman soldier. Domitian raised it to 12 aurei a year, or 13 ases, and about a sextans a day: but the fraction could not be paid, else many *sextantes* of Domitian and his successors would be found. But there were shameful deductions from the poor soldiers to their greedy colonels, &c., as in our days; so that the soldiers would have blessed Mars had he cleared 10 ases. It was that extortion which discontented the Pannonian army. "Denis in diem assibus animam et corpus æstimari; hinc vestem, arma, tentoria; hinc *servitium centurionum, et vacationes munerum, redimi.*"

coinage, there were denarii struck of two sizes. The large denarius of Caracalla, and his successors, is one third heavier than the usual one; and it is common sense to conclude that it bore one third more value; or was worth 6 brass sesterterii, while the other retained its first value of 4. This large denarius of course had 2½ assaria; and is called by the writers of the Augustan History, and in rescripts of the period, *argenteus*, or the *silver piece*, and *argenteus philippus*, or the *silver philip*; the word *philip* having, as before observed, become a familiar appellation for any coin. The common denarii now first begin to be termed *minuti*, and *argentei philippi minuti*, and the like; to express their being smaller than the other*. The first *argenteus* is worth nearly one shilling sterling.

* Some have been so absurd as to suppose that the large denarii were of the same value with the small, only of worse metal. The fact is, as I have observed from the few which have any difference of metal, the smallest are always the worst metal, and the largest the best, as it was natural the most important coin should be: but there is very seldom any difference at all.

In the life of Alexander Severus, by Lampridius, we find that emperor, by a prudent regulation, to have reduced the price of pork and beef at Rome from 8 minuti a pound to 2 and to 1: *ut quum fuisset octominutalis libra, ad duos, unumque,*

Zozimus* and other writers tell us, that Aurelian restored the coinage to its purity. An anecdote to which no medallist will assent, as to his silver, which is indeed extremely scarce,

utriusque carnis libra redigiretur. The *minutus argenteus* of that age was of about 40 grains; and, from the badness of the metal, was not worth above four-pence of our money. He reduced the price from 2s. 8d. a pound, to 8d. and at last 4d. This is the first mention of the *minutus*; but we know from the coins that it existed long before.

Valerian mentions in rescripts *argentei philippeï minuti*, and *argentei philippeï minutuli*. The old denarii were called after the princes who struck them, as *argentei Aureliani*, in another rescript of Valerian I. for silver of Marcus Aurelius: *argentei Antoniniani*, that of Antoninus Pius, in a rescript of Aurelian. *Argenteus* was now synonymous with *denarius*; the *argentei* of that age being only the size of the old denarii.

* Ἡδὴ δὲ καὶ ἀργυρίον νεὸν δημοσία διεδοκε, τὸ κιθῶλον ἀποδοῦναι τοὺς ἀπὸ τοῦ ἔγμου παρασκουάσας, τοῦτω τε τὰ συμβόλαια συγχύσεως ἀπαλλάξας. Zoz. Hist. Nov. Lib. 1. The *αργυρίον* is *money* in general, not silver in particular. Zozimus, however, speaks of *all* money that was adulterated being called in. Zozimus, as we learn from Suidas, flourished about the year of Christ 500, that is near two centuries and a half after Aurelian: his testimony is therefore of little worth. Such was the ignorance then creeping in, that Vopiscus, in his life of Probus, says, “*Probum—scriptorum inopia jam pene nescimus.*” He wrote this fourteen years after the death of that prince!

his coin being just as bad as any before or after him. If he effected any alteration in the silver, it must have been toward the end of his reign; so that very little of the new coin could appear. Indeed the authors say it was after he had conquered all his competitors, and we know that this was not till the last year of his reign; he only reigning five years. But it is most probable that he only made the attempt without success: if indeed it was not wholly confined to the gold, upon which there is a palpable change under Aurelian, as shall afterward be shown.

What is still more remarkable, we are told that Tacitus, his successor, allowed no brass to be mixed with silver upon any account*. Yet the very few silver coins we have of Tacitus have vast alloy. How are we to reconcile this? What will many of the medallists say to it, who take the common *denarii aerei* of Tacitus for his silver coinage?

* Cavit ut si quis argento publice privatinque æs miscuisset; si quis auro argentum; si quis æri plumbum; capital esset in bonorum prescriptione. Vopis. in Tacito. The decree was extant in the records of the Senate, written on ivory, and quoted by Vopiscus, from the original, in the 6th press of the Ulpian Library.

We know, however, that Diocletian did restore the silver to its purity: his *denarii* being of as fine silver as the most ancient, but very small. Indeed, from the time that Caracalla struck the large *denarius*, both it and the small had been lessening by degrees: till after Gordian III. the latter totally vanished, and the large alone remained. This, in the time of Gallienus was the sole *denarius* of silver, and so much diminished as only to equal the *minutus*, or small one, of Caracalla. But Gallienus introducing the *denarii aerei*, instead of the *sestertii*, the *argenteus*, though reduced more than a third in size, bore 6 *denarii aerei*, its old standard of *sestertii*. Writers of the period, and after, say the *denarius*, or *argenteus*, was of 60 *assaria*: it follows that each *denarius aereus* had 10; and received its name from that circumstance, as well as its being of the size of the silver *denarius*. These *assaria* are of the size of the *argentei*, at just said; and show copper to have retained its old proportion to silver of about 1 to 60.

Such was the silver coinage till Constantine I. introduced a larger coin. By a whimsical idea he accommodated this new silver coin to the pound of gold, so that 1000 of the former

in tale were to equal the latter in value: from this the new piece had its name *milliarensis*, or *the thousander*. It is of 70 grains at an average, or 70 to the pound of silver. The code*, of which the numbers are quite corrupt, says 60; but we know to a certainty from the coins, that 70 grains is the medial weight of the *milliarensis*; and that of course for LX. we must read LXX. For did 60 go to the pound, each coin must weigh 86 grains; of which weight not so much as one occurs in any cabinet whatever. The *milliarensis* was worth about 10*d.* of our money; and went for 24 *folles*, or largest

* Cum publica celebrantur officia sit sportulis nummus argenteus—nec majorem argenteum nummum fas sit expendere, quam qui formari solet, cum argenti libra una in argenteos LX. (*lege* LXX.) dividitur. Cod. Theodos. de expensis ludorum. Mr. Raper has observed, that Constantine's silver coins were 70 to the pound, but has not thought of correcting the code, though so easy and minute an error ought to have been altered, as is that other similar after quoted in the same code, with regard to VII solidi in the ounce. In fact, if the *milliarensis* had but 70 grains, 72 must go to the Roman pound, as of the solidi; but 2 may be allowed for coinage, while the alloy alone would pay for coining the gold. It is possible the *milliarensis* had 72 grains; and we may allow 2 grains to have perished by the softness of silver. But on the statement of the *milliarensis* afterward.

brass coins of half an ounce. Gold was to silver a little more than 14 to 1*.

The *denarii*, or *argentei*, were however still coined, and were the money most common in currency. As they had been rated at 100 to the pound of silver in tale, they began in the strange language of the time to be called *centenionales*, or *hundreders*. They now diminish very fast in size†: those of Constantine I.

* Jubemus ut pro argenti summa quam quis thesaurus fuerit illaturus, inferendi auri accipiat facultatem; ita ut pro singulis libris argenti quinos solidos inferat. Cod. Theodos. de Argenti pretio, et Cod. Justinian. L. X. tit. 76. To the pound of silver went 70 milliarenses, hence 14 of 70 grains went to the solidus, a coin of 70.

† To mark the decline of the Byzantine *denarius*, I have weighed all these in Dr. Hunter's cabinet, and shall here put down all their weights in troy grains, after mentioning that the small capitals are mint-marks. Constantine I. when Cæsar, 46—ANT. 48—PTR. 43—TROB. 43—PTR. 42—CONST. 37. *Delmatius*, TR. 30. *Crispus*, all billon. *Constans*, SIS. 51—AQ. 44—TES. 48—TR. 46. *Constantius*, TR. 46—TR. 44—R. 51—LVG. 36—CON. 51—CA. 47—SIRM. 48—LVG. 41—ANT. 30 CON. 30—CON. 29—SMN. 45—LVG. 29—LVG. 37—CA. 48—SMT. 48—CB. 31—PCON. 31—SIRM. 28—no mark, 47. *Magnentius*, all large. *Gallus*, SIRM. 40—54, no mark. *Julian* II., LVG. 30—CON. 26 clipt.—TCONST. 31—CONST. 32

and II., Constans, Constantius, weigh 50 grains down to 40: those of Julian II., Jovian, 40

—CONST. 31—CONST. 37—CONS. 29—CONS. 26—SLVG. 31—LVG. 27—LVG. 34—SCONST. 30—PLVG. 26—LVG. 33—20 WORN—PLVG. 31. *Jovian*, CONS. 29—SMN. 34—CONS. 22—CONS. 29. *Valentian*, CONS. 31—CONS. 33—CONS. 25. (The two last are the same in every point save weight.)—PLVG. 21—AQPS. 21—TRPS. 30—ANT. 32—SLVG. 32—SISCP. 21—AT. 29—AT. 28—CONS. 26—RQ. 31—RP. 33—TRPS. 29—RP. 32. *Valens*, PLVG. 28—PLVG. 29—LVG. 24—CONS. 22—CB. 24—CL. 19—ANT. 31—ANT. 29—CONS. 31—LRP. 31—TRPS. 30—AQ. 32—AQPS. 27. *Procopius* 27, no mark. *Gratian*, RPL. 31—SISCP. 23—CONS. 31—TRP. 30—TRP. 30—AQPS. 22—AQPS. 30—TRPS. 30—RP. 20—SISP. 24—LVG. 28. *Valentinian II.* AQPS. 30—TRPS. 24—TRPS. 30—AQPS. 34—TRPS. 25—TR. 30—RP. 27. *Theodosius I.* AQPS. 26—TRPS. 29—TRPS. 29—TRPS. 34—TRPS. 31—LVGPS. 26—RE. 29—AQPS. 26—MDPS. 21. *Magnus Maximus*, TRPS. 30—AQPS. 24—TRPS. 24—TRPS. 23—MDPS. 26—AQPS. 23. *Victor*, MDPS. 24—MDPS. 24—MDPS. 22—MDPS. 22—MDPS. 30. *Eugenius*, LVGPS. 30—TRPS. 24—TRPS. 38. (The two last are quite the same in every other point.)—LVGPS. 31—TRPS. 26. *Arcadius*, TES. 30—MDPS. 20—MDPS. 22—MDPS. 17—TRPS. 24—TRPS. 25—MDPS. 20—MDPS. 17. *Honorius*, RVN. 30—MDPS. 25—MDPS. 21—RMPs. 26—MDPS. 18—CONST. 34. *Constantius Tyrannus*, 20—LVG. 25—SMTR. 18—18. *Constans Tyrannus*, s. 32. *Jovinus Tyr.* KONT. 20—SMLD. 24—MDPS. 20. *Priscus Attalus*, PSTR. 29—PST. 23. *Valentinian III.* *Victoria Augg.* 16. very small, and I believe a quinarius. *Ateula*, 26, 27. *Theodosius II.* 22. *Severus III.* 17. seems a quinarius. *Zeno*, 12, 16 (quinarii). *Anastasius*, 25—14—16—15. all denarii: there

down to 30: those of later princes till Justinian, 30 to 20. Under Heraclius, when they cease, the denarii are from 15 grains down to 10. The *milliarensis* attends the *denarius* in proportional decline of size: those of Constantine I., Constans, &c., being of about 70 grains at a medium; while those of Arcadius do not exceed 60; and those of Justinian have fallen to about 30 grains*. The *milliarenses* were also called

are much smaller, which are quinarrii. *Justinus*, 20—22—20—22—20: there are 3 of 10 gr. or quinarrii. *Hil-dericus*, 19 a den. 10 a quin. *Justinian*, 16—14—18—15—21—16—16 all denarii: quinarrii are 1 of 12, 3 of 10, 1 of 8. *Athalaric*, 6 of 10 gr. all q. *Theodahat*, 22, a denarius; 10 a quin. *Witiges*, 22—22. both den. *Baduella*, 21 a den. 8 a quin. *Thela*, 20 a denarius. *Mauritius* and *Phocas*, none, save large. *Heraclius*, 15 a den. 9—6—5, all quinarrii, the 5 very good. There is one piece of 15 gr. given to Theodosius III.: if his, it is a denarius; if not, a rude quinarrius of Theodosius II. All after, being about three or four coins, are from 40 to 90 grains.

* The weight of the *milliarensis* stands as follows in Dr. Hunter's cabinet. The first is a most beautiful one of *Constantine* I. which weighs $69\frac{1}{2}$ grains. *Constans* has one of $72\frac{1}{2}$, and one of $68\frac{1}{2}$. *Constantius* one of $75\frac{1}{4}$. *Magnentius* only one of tolerable silver, which, though a little rubbed, weighs $77\frac{1}{2}$. *Julian* II. one of $68\frac{1}{4}$, likewise something rubbed. *Valentinian* has one of 69, one of $68\frac{1}{4}$, one of 68, another of $66\frac{1}{4}$. Of *Valens* there are of 67, $67\frac{1}{2}$, $69\frac{1}{4}$, 70. Of *Gra-*

majorinae, or *biggers*, in the beautiful language of the period. These were the chief articles of silver coin, till the curtain dropped over the farcical tragedy of the Byzantine empire.

But it is time to mention briefly the smaller silver coins of Rome. The denarius had 2 *quinarii*, or pieces of 5 ases; but afterward of 8, when the denarius bore 16. The *quinarius* was at first called *victoriatu*s, from a Victory, which was its common reverse, from its first coinage down to the latest, which occur of the Byzantine empire. Pliny informs us that the *victoriatu*s was first struck by the

tain one of 75½. *Arcadius* has one of 63½: and *Priscus Attalus* one of 81¼: but this, and that of *Magnentius*, another usurper before stated, seems not correctly sized. However, put them all together, the number of grains amounts to 1198, which divided by 17, the number of *milliarenses* adduced, gives 70, 8-17ths, as the very highest medium of the *milliarensis*. I conclude then that 70 grains was the weight of the *milliarensis*, as of the *solidus*: and that as it was coined in relation to the gold pound, it was made exactly of the weight of the chief gold coin. Many *milliarenses*, much clipt, will only weigh from 60 down to 50 grains. Of *Justinus*, the *milliarensis* weighs but 40 grains: of *Justinian* 36: of *Mauritius* and *Phocas* 32: of *Heraclius* about 26. In general, the *milliarensis* may be known from weighing one third more than the denarius.

Lex Clodia, about the 525th year of Rome, or 40 years after the first silver coinage. In the Constantinopolitan period, the quinarius some think to have been called *κερατιον*, because it was worth a *κερατιον* of gold, 144 of which went to the Roman ounce. But this was not the case, for when the word *κερατιον* first appears in writers, the denarius had not above 30 grains in weight, so that 25 going to the gold solidus, of which 6 went to the ounce, 130 denarii must have gone to the ounce of gold. I am convinced from this, that the *κερατιον* was only another name for the denarius, when much reduced in size, owing to the great scarcity of silver in Constantinople, where, however, gold was common; and the gold solidus was of course never diminished. For Montesquieu has well observed that gold must be common when silver is rare*. To this was it owing that gold was the common regulation of accounts in the eastern empire; and Montfaucon has published one, in his *Palaeographia Graeca*, reckoned in *solidi* and *ceratia*: now who will suppose accounts kept in the largest gold and smallest silver, the commonest gold, and scarcest silver coin? The highest number of *κερατια*

* *Esprit des Loix*, liv. xxii. ch. 9.

in that account are 24; now of quinarii, 50 went to the solidus. From this it appears to me that the *κερατιον* is certainly the *denarius*, or *centenionalis communis*: and likewise that 25 denarii still went to the solidus, as formerly to the aureus; though many writers, from no authority, give but 20 denarii to the solidus. We also meet with the *δικερατιον* in writers, but not in account: it was merely an improper name given to the *milliarensis*, when the scarcity of silver made the *denarius* be reduced, and no *milliarensis* coined: so that the current *milliarensis* of former reigns happened to be double in weight to the *denarius*, or *centenionalis*. The quinarii diminish in size with the denarii: those of Augustus have near 30 grains: of Severus 25: of Constantine I. 20: of Justinian 12: of Heraclius only 5 grains. A new coinage seems to have come in after Heraclius; for what very little silver occurs after him, which, in the richest cabinets, does not exceed a dozen coins, consists of large unshapely pieces of base metal.

The consular denarius had also four silver sestertii, till the as fell to half an ounce, when it was thought preferable to coin the sestertius in brass, as it ever after was. The very last silver sestertius which appears, is one with

a head of Mercury and H S: reverse a caduceus, P. SEPVLLIVS; who appears to be the P. SEPVLLIVS MACER of the denarii of Julius Cæsar. If so, as is most probable, the sestertius was coined in silver down to Augustus; and it is of course not to be expected that any of brass can appear till Augustus, under whom they are actually quite common. I have indeed seen no coin which could be a consular brass sestertius, and though we certainly have brass dupondii of Cæsar, yet it is reasonable to infer that the brass sestertius was first issued by Augustus. Not one sestertius of silver occurs during the whole imperial period: yet we know that the sestertius was the commonest of all coins: strange that this did not lead medallists to the truth! The consular sestertii of silver, marked HS, are not uncommon: nor the quinarii: but the latter are very scarce of all the emperors, if we except one instance, the ASIA RECEPTA of Augustus.

ARTICLE III. ROMAN GOLD.

The GOLD coinage of Rome, the last part of this subject, now awaits examination. Pliny informs us that gold was first coined at Rome, sixty-two years after silver; that is, the 547th year

of that city, by vulgar account, or before Christ 204. Of so late a coinage, it is reasonable to expect that the whole progress should be known; and accordingly it is believed that, with Pliny's assistance, the very first coinage may be clearly pointed out. That author's words are: "Gold was coined sixty-two years after silver; and the scruple went for 20 sesterces.—It was afterward thought proper to coin 40 pieces out of the pound of gold. And our princes have, by degrees, diminished their weight to 45 in the pound." The pieces which remain, confirm Pliny's account in every point. We have that very coin, weighing a scruple, which went for XX sesterces. It has the head of Mars on one side, and an eagle on the other, and is marked XX. We have also its double marked XXXX, or 40 sesterces: and its triple marked ψ X, or 60; for that arrow-like character is the old numeral L or fifty, as is evident from many consular coins, and from inscriptions. Savot and Hardouin, who were ignorant of this, could not explain it, but by putting the Roman mark for fifty, as a V, and reading backwark XV. Others have offered various readings, as 10 victoriati, 10 denarii, &c. &c. &c.; but not one has lighted on the truth, though the coin itself led to it, being

just triple the XX in weight. There is also half the largest or XXX. The smallest or of XX weighs $17\frac{2}{3}$ grains: the XXX is of 26: the XXXX of 34: the LX or drachma has 53: which clearly shows the Roman metallic ounce to have been less than that now used in common at Rome, by 34 grains, for a drachm of 53 gives an ounce of 424, not 458. I believe there is also the didrachm of this coinage of 106 grains. The aurei were now 48 in the pound*.

Pliny proceeds to tell us that afterward there were 40 in the pound; that is, in other words, that the aureus was raised from 106 to 126 grains; being nearer the standard of the Greek didrachm, or common gold coin, and evidently intended that the one should go for the other.

He mentions no other variation but that the

* Dr. Birch, *On the Roman and Greek Weights and Measures*, MS. in the British Museum. Cat. Aysc. 4391, says he saw the piece of xxxx in Signior Nicolini's Collection at Florence, weighing 35 troy grains. He seems to think the xx, &c. imply *oboli*; and that they were struck by Greek states under the Roman dominion. But the obolus of Greece, when under the Roman dominion, was a brass coin; and it is impossible that gold should be estimated in brass. He forgets Pliny's piece of xx sestertii, which, in the consular times, were of silver.

aureus had gradually diminished to 45 in the pound. But we know from the coins, that in Sylla's time, the aureus weighed no less than 164, 165, 166, 167, 168 grains; that is, 166 grains at an average, or 30 in the pound of gold*. Such are commonly marked *SVLLA IMP.*; and we know from Cicero that Sylla brought such confusion into the coinage, that no man knew what he was worth. But before proceeding further, let us estimate the aureus.

In the first coinage, we have just now seen from Pliny and the coins, that the scruple of gold went for 20 sesterces: *such as then were* is Pliny's expression; that is of $2\frac{1}{2}$ ases, for the denarius was not of 16 ases, till twenty-nine years after, when the as fell to half an ounce. The drachm of three scruples was of 60 sestertii, or 15 silver denarii; and the didrachm or aureus, the common Roman gold coin, was worth 30 silver denarii, equal to 1*l.* sterling: gold being to silver as $17\frac{1}{7}$ to 1.

Mr. Clarke, in his singular ignorance of coins,

* Plutarch *in Lucullo*, says Lucullus superintended Sylla's coinage in Peloponnesus: but it is not on the Greek model, the didrachm being only 132 grains at a medium.

argues that these first gold coins are not genuine, and speaks as if they had only been published once from the French king's cabinet*. He seems to have seen the Nummi Pembrokiani, for he quotes that work: if he had looked into it he would have found them all. Every medallist knows they are of undoubted antiquity; and different ones I have myself seen. In the fine collection of Robert Austen, Esq. is the LX in particular in good preservation: and Dr. Hunter's cabinet has both the LX and the XX. See plate II.

The aureus seems to have continued at 30 silver denarii till Sylla's time; for it would appear that gold becoming more common at Rome about that period, the aureus was enlarged a whole third that it might still bear the 30 denarii. But Sylla having taken Athens, and the arts and manners of Greece now becoming objects of imitation to the Romans, it is probable that after his laying down the dictatorship, or about the year of Rome 675, seventy-seven years before Christ, the aureus fell to the rate of 40 to the pound, as Pliny tells us; and being reduced

* They are also published in the Cabinet de St. Genevieve, Paris, 1692, folio.

near the scale of the Greek χρυσος, passed for 20 denarii, as the latter for 20 drachmas, being in currency 13s. 4d. English. This is the more probable, because we know from Suetonius that the great Cæsar brought so much gold from Gaul, that it sold at 3000 *nummi* a pound; that is, 9 times its weight in silver: but the Gallic gold was of a very base sort.

However, in the reign of Claudius we know the aureus went for 100 sesterii, or 25 silver denarii; at which rate it remained. For that prince made a law, that no lawyer should take above 10,000 sesterii for acting in the whole of any cause whatsoever*. The Digest, in repeating this law, calls the fee 100 aurei; which makes 100 sesterii to the aureus, or 25 denarii. Tacitus tells us that when Galba supped with Otho, the latter gave each of the guards 100 *nummi*, or sesterii†. Suetonius, in relating the same thing, says he gave each man an aureus‡. Dio Cassius, who lived in the time of Alexander Severus, tells us in express terms that the Roman

* Tacit. Ann. lib. xii. cap. 7. Digest. lib. i. c. 13. § 12.

† Hist. lib. i. c. 24.

‡ In Othone, c. 4.

aureus was of 25 silver denarii*. Passages of many other ancient writers establish this fact, of the aureus being rated at 25 denarii, to a certainty. This was 16s. 8d. English, in currency; but valuing gold at 4l. an ounce, the intrinsic value of the aureus is about 1l.

The aureus fell by degrees to 45 in the pound, as Pliny says. His words are, *till at last* it came to 45, *postremo vero*. Budæus read *postremo Nero*; and imputed this fall to Nero: and it is mortifying to observe that this foolish alteration has embarrassed the science for two centuries, though Nero's coins are neither larger nor smaller than usual. It is also worthy notice that Domitian, as Suetonius tells us, added a fourth *stipendium* to the soldiers, of 3 aurei: which shows that they had formerly 3 *stipendia* of 3 aurei each: or that their pay was 9 aurei a year, paid every four months, as Gronovius explains it. But I think it more reasonable to infer, that in their winter quarters no stipendium was paid till Domitian's time, as no service was done; and that three months were

* Χρυσουν γαρ δη και εγω το νομισμα το τας ΠΕΝΤΕ και ΕΙΚΟΣΙ δραχμας δυναμενον, κατα το επιχωρισιν ονομαζω. lib. iv. — From two other passages the very same proportion may be drawn of 25 denarii to the aureus.

allowed for wintering; they being at that time without pay, but furnished with necessaries by the state. For it seems unlikely that their pay should be reckoned by the four months: but the division of the year into quarters was as familiar to the Romans, as to us. The pay of our foot soldiers is now nearly 9*l.* 9*s.* a year; and I am convinced from this and many circumstances, that in imperial Rome money was much upon the footing it now has in England: for such is the increase of precious metals since the discovery of America, that the revenue of Great Britain is now equal to that of the whole Roman empire*; and in London most articles bear the same price that they did in Rome.

It is clear from the coins, that it was in the time of the civil wars of Otho and Vitellius, that the aureus fell from 40 in the pound, or about 125 troy grains at a medium, to 45 in the pound, or about 110 grains of medial weight each. It continued of this standard till the time of Elagabalus, when it fell to about 92 grains at an average, or near 55 in the pound. Under

* Mr. Gibbon values the Roman revenue at between 15 and 20 millions: but perhaps it did not exceed 12 or 14. See estimates of the revenues of several provinces in Arbuthnot's work.

Philip, aurei of two or three sizes first appear; they have a head of Rome on one side, and various reverses; are of very rude fabric, and thought to be done in some barbarous part of the empire. Yet this practice of making different sizes of gold coins was now continued, so that under Valerian I., Gallienus, and his successors, five or six sizes occur. Those of Gallienus are of about 30 grains, of about 65, 86 to 93; and double aurei of from 172 to $183\frac{1}{2}$ grains. The aureus properly so called is that from 86 to 93; the double being from 172 to $183\frac{1}{2}$. Those about 30 or 32 grains are evidently *trientes aurei*, as mentioned in the *Historiæ Augustæ Scriptores*: those of 62, 63, 64, 65, being double *trientes*, or two thirds of the aureus, perhaps called *minuti aurei*. That the aureus went for 25 silver denarii down to Alexander Severus is clear, but what the value of these new sizes was, is not apparent. Supposing that standard to remain, as we have no authority for a change till the time of Constantine I., the double aureus will have borne 50 silver denarii, the aureus 25. The *triens* must have had 8 silver denarii, and 2 denarii *ærei*: the double *triens* 16 silver denarii or *argentei*, and 4 denarii *ærei*. The denarius was not then worth above 14*s.* English. I suspect that the only alteration Aurelian made

in the money, was confined to the gold; for certain it is, that under him, and his successor Probus, the common gold piece or aureus is of 100 grains, a size confined to these two emperors. There are also halves of about 50 grains; and double aurei, which are commonly of very fine workmanship, of upward of 200 grains. We know from history that gold was very common in the time of Gallienus*; and particularly in that of Aurelian; who after subduing Zenobia, and rifling all the treasures of the east, declared, as we are told, that nature had produced much more gold than silver†.

This leads me to think that the reason of the great commotions of the mint under this prince, was his ordering the gold coin to be restored to its size, but at the same time to go for no more silver than it did. So very little silver occurs of

* Gallienus displayed a magnificence in gems and gold equal to that of Nero, or of Elagabalus. See his Life in the *Historiæ Augustæ Scriptores*.

† *Habuit in animo ut aurum neque in cameras, neque in tunicas, neque in pelles, neque in argentum (to make electrum), mitteretur; dicens plus auri esse in rerum natura quam argenti: sed aurum per varios bractearum, filorum, et liquationum, usus perire, argentum autem in suo usu manere.* Vop. Div. Aurelian. inter *IIist. Aug. Script.*

this period, that it is plain no alteration in the silver produced the war with the moneyers; and in the brass he made no change; or if he had, it were strange indeed, that such commotions should arise about so trifling a metal. But if, as appears from the coins, he ordered the aureus, which had fallen to about 80 grains, to be raised to about 100, it is no wonder the contractors were in an uproar; for a whole quarter of the coinage, amounting as would seem to all their profits, was lost. There is every reason to suppose, therefore, that it was the alteration of the gold coin, and of no other, which produced the civil war with the moneyers. Aurelian judged that when he found gold so common in the east, it was equally so in the west; and that the moneyers must have made a most exorbitant profit: but his ideas on the subject were partial and unjust; and after his short reign, which did not exceed six months after the alteration, the gold returned to its former course: though a few pieces occur of Aurelian's standard, struck, as would seem, in the commencement of the reign of Probus his successor.

Down to Constantine I., the aureus stands at between 80 and 70 grains. This prince, though he seems not to have altered the size of the

coin instead of the *aureus*, gave the *solidus* of 6 in the ounce of gold*, and to go for 14 of his new silver coins called *milliarenses*†; and 25 *denarii* as before: gold being to silver about 14 to 1. The *solidus*, or chief gold coin, continued of the same standard to the very close of the Byzantine empire; for gold was common in Constantinople, while silver became more and more scarce. The *solidus* was worth 12s. sterling.

With regard to the value of gold in Constantine the Ist's time, Mr. Clarke is so lost that he seems to have left all his senses behind him. In page 267, he absurdly asserts that 20 *denarii* went to the *solidus* in the time of Theodosius I.; and proceeds with this deplorable error to the end of his work. He then tells us, that only 14 *denarii* went to the *solidus* under Con-

* Cod. Theodos. lex 1. de Ponder. "VI. solidos quaternorum scriptulorum, nostris vultibus figuratos, adpendat pro singulis unciis: XII. pro duobus." The old reading was VII. et XIV. which misled Gronovius: but if the coin was of 4 scruples, as is plain from all cabinets, there were VI. and not VII. to the ounce, which had 24 scruples.

† Οστε κατὰ νομισμα λαγχανειν μιλιαρησια ΙΔ. Glossæ Nomicæ apud Gronov. de Pec. Vet. l. 1v. c. 162. See also the quotation from the two Codes, about the 5 solidi to be paid for a pound of silver.

stantine I. ! From his strange confounding of the *milliarensis*, a coin of 70 grains, with the *denarius*, which of that period was about 40, and under Theodosius I. did not exceed 30, he finds, p. 262, that gold was to silver in the first Constantine's time as $10\frac{1}{2}$ to 1. And after offering a number of wise arguments, he, six pages after, tells us that in the time of Theodosius I., or of Arcadius and Honorius, 20 *denarii* went to the *solidus*; and that gold was to silver as $14\frac{1}{2}$ to 1. That is, in the course of half a century, from no visible cause, when the empire was established in the east, the native country of gold, and that 'metal of consequence getting more and more plentiful, and silver scarcer and scarcer, as he owns himself in p. 333, gold increased in value about one third; that is, more than it has done in Europe in the course of seven centuries!

Mr. Raper, though he has also strangely confounded the *milliarensis* with the *denarius*, telling us, p. 52, that Constantine I. substituted the former *instead* of the latter, has yet kept common sense for his guide, and told us that gold was to silver in the time of Constantine I. as in that of Theodosius I.; that is, as he makes it, $14\frac{2}{7}$ to 1.

The fact is, that had any change taken place in the coinage between Constantine and Theodosius I., that is in less than 50 years, the laws of that period, which are all in the Theodosian Code, must have noticed it. What is stronger, the coins must have spoken it at once. But code and coins are silent. It is clear from the passage above referred to, that the pound of silver was rated at 5 solidi; that is, gold was to silver above 14 to 1. This is allowed to be the relation in the time of Theodosius I., and there is not a shadow of supposition, that it had either increased, or decreased, since the time of Constantine I.; as indeed it were odd if, in the course of half a century, any alteration of Constantine's new estimate had taken place.

In the days of the first emperors the aureus was worth 25 denarii, or gold to silver about $13\frac{1}{3}$ to 1. Clarke says $12\frac{1}{2}$ to 1, because he takes the aureus to have weighed just two silver denarii: but to point out all his errors would require a volume as big as his own *. The

* Clarke's work is recommended in the Preface merely as an introduction to English coins. If we take our estimate of Greek or Roman money from him, we shall be shockingly misled. I do not wonder that Mr. Raper thought his book not even worth mention.

medial aureus was 110 grains, the denarius 60. That standard remained the same till the time of Alexander Severus, after which we have no *data*: but it is likely that Constantine took the value as he found it; and that from Alexander Severus to Constantine, if we except the short instance of the end of Aurelian's reign, and beginning of that of Probus, gold was rising in value till it exceeded 14 to 1. The badness of the silver of that period is a very strong argument for this supposition: it is such that one fifth may be put to the medium of alloy; and if, as seems actually to follow, one fifth be added to the value of the gold, which is not debased, it will have been to silver as 16 to 1, from the commencement of base silver money till the time of Diocletian; excepting, as just mentioned, some coins of Aurelian, and of Probus. When Diocletian reformed the silver, the standard of Constantine, $14 \frac{1}{5}$ to one, seems to have taken place.

As a state advances to its height, gold increases in value; and as a state declines, it decreases, providing the metals are kept on a par as to purity. Hence we may argue that gold decreased in its relation to silver, perhaps four or five centuries after the foundation of the

Byzantine empire*. However, such were the effects of want of trade in Europe, that Constantinople furnished most European kingdoms with gold in coin, which otherwise would, from their want of arts, and of intercourse with the east, then the grand seminary of that metal, have almost been ignorant what gold was. These gold coins were called *Bezants* in Europe, because sent from Byzantium, or Constantinople; and were *solidi* of the old scale, 6 to the ounce. In Byzantine writers, the solidus is also called *nomisma*, or *the coin*; *crysinos*, because of *gold*; *hyperperos*, from its being refined with fire; or from its being of bright gold flaming like *fire*. The solidi also, as the *aurci* formerly, received names from the princes whose portraits they bore; as *Michelati*, *Manuelati*.

It may be proper to add, before passing to the parts of the aureus, that *solidus* is a term used for the aureus by Apuleius, Met. lib. 10, who lived in the time of Antoninus the Philosopher; nay, so early as in the Prætorian edicts of the time of Trajan. It was then a distinction

* Under Alexius Comnenus, about the 1180th year of our æra, we know that but 4 milliarense went to the solidus. See Montfaucon's *Analecta Græca*, p. 377.

from the semissis, or half. In the time of Valerian, when *aurei* of different sizes had been introduced, it became necessary to distinguish the particular aurei meant. Hence in the imperial rescripts published by the *Historiæ Augustæ Scriptores*, Valerian uses the term *philippeos nostri vultus*, for the common aurei. Aurelian uses the same term *aurei philippeï*, for the aurei which he had restored to their size in some degree. Gallienus uses *aurei Valeriani* for his father's coins. *Aurei Antoniniani* are likewise put by Valerian for coins of the early Antonini, of superior standard to any then used.

Only the parts of the aureus now remain to be discussed. We have seen that in the first gold coinage at Rome, the aureus was divided into four inferior parts; the semissis, or half, of LX sestertii; the tremissis, or third, of XL; the fourth, whose name is unknown, of XXX; and the sixth, or scrupulum, of XX. But very soon after, all these were dropt, save the semissis, or half; which occurs in the consular times, and of some emperors, but is extremely scarce, so that few must have been struck.

It is a very strange opinion, adopted by

almost every writer on this subject, that the Romans called the gold semissis a *denarius aureus*. There is not the slightest authority for such a dream. *Denarius* was used as our penny, for a coin. *Gold penny* was the term of Henry the Third's time; and in Scotland was used in all the acts of Parliament for *gold coin*. The common aureus was called *denarius aureus* very naturally, because it was the same size with the silver denarius. Hear Petronius Arbitrator: "Se-
 " quebatur puer cum tabula terebinthina, cry-
 " stallinis tesseris: notavique rem omnium de-
 " licatissimam. Pro calculis enim albis ac
 " nigris, aureos argenteosque habebat dena-
 " rios." *Calculi* were just equal to our backgammon men, as the *tesserae* were the dice. The *calculi* were synonymous with the *latrunculi*, as may be seen in Bulenger's work *De Ludis Veterum*: and the only game in which both *tesserae* and *calculi* were used, was the *ludus calculorum*, very similar to our backgammon. These *calculi* were even black and white like our backgammon men; as Arbitrator here tells us, at the same time that he mentions these he saw, being gold and silver denarii. Now who will suppose these backgammon men of different sizes? Is not the aureus the same size with the silver denarius, as

our guinea is of our shilling; but the half-aureus, which they would have to be here meant, just half its size? They do not seem even to recollect, that in the time of Arbiter and Pliny, who mention the *denarii aurei*, these could not be so called from passing for 10 silver *denarii*, for the half-aureus was then of 12½. Apuleius, a writer near Pliny's time, also mentions the *denarius aureus*; and he and every other ancient author, I will be bold to say, use it merely as a rounder and fuller phrase for aureus, which, by itself, likewise implied *gilt, golden, glittering, rich, beautiful, precious*. No wonder then that they added *denarius*, to ascertain their meaning with precision, when the word was of so various signification. Scaliger, Villalpandus, Savot, and others, have with great propriety used the *aureus denarius* in its ancient meaning, as the Augustan term for the *aureus*.

The gold *semissis*, or half-aureus, is termed *quinarius* by medallists with greater propriety. This is very uncommon of all the consular and imperial times, as has just been observed, but continued the only division of the aureus till the time of Alexander Severus. That prince, as Lampridius informs us, coined se-

misses and tremisses of gold, but none have yet been found. It is likely they were all re-coined by his immediate successors who again raised the tributes. He also proposed to issue *quartarii*, but lived not to accomplish his scheme*.

Trientes, or tremisses, of gold are however mentioned in rescripts of Valerian I, and actually exist of him, and his son Gallienus weighing about 30 grains. Gallienus, in a rescript to be found in the *Historiæ Augustæ Scriptores*, mentions *Aurei Valeriani* CL. *Trientes Saloninianos* CCC. The commentators, quite in their usual way, explain the *aurei valeriani* at length: but as to the *trientes*, mum! they will not speak for fear of showing their

* Tuncque primum semisses aureorum formati sunt. Tunc etiam, quum ad tertiam partem auri vectigal decidisset, tremisses. Dicente Alexandro etiam quartarios futuros, quod minus non posset. Quos quidem jam formatos in moneta distinxit, expectans ut, si vectigal contrahere potuisset, et eosdem ederet. Sed quum non potuisset per publicas necessitates, conflari eos jussit, et tremisses tantum solidosque formari.—Lamp. Vit. Al.

Lampridius adds in the same place that Alexander Severus called in all the vast coins of Elagabalus of 2 aurei, 3, 4, 10, nay 100 aurei. No gold medallions of that prince have yet been found.

ignorance. Upon reading the passage, I had recourse to Dr. Hunter's cabinet, the best commentator I know with regard to those subjects, and found that the trientes of Salonina the wife of Gallienus weighed 33 grains, while his own only weighed 30. The reason of the trientes *Saloniniani* being mentioned, appeared clearly from their being of a better standard than his own.

We read nothing more of parts of the aureus, nor do they occur in cabinets till the Byzantine empire, when *τριμισια*, or tremisses, again appear. The ancients had a singular predilection for the number three*, hence they used it as a divisor preferable to the more natural mode of halves. From Valentinian downward, in particular, thirds are the commoner gold coins: they are worth 4s. intrinsically. The *ημισυ*, or semissis, likewise is mentioned; but none occur earlier than Basiliscus; and indeed I believe he is the only prince of whom they are found. The gold tremissis was the pattern of

* Of this take a singular instance from Livy. "Ejus rei causa ludi magni voti æris Trecentis, Triginta Tribus millibus, Trecentis, Triginta tribus, Triente." Lib. xvii. c. 10.

the early French and Spanish gold coins; as the silver denarius in its diminished state was that of the Gothic and Saxon penny.

So much for this dry, but necessary subject; which is so dull, that one might go to sleep over it, were it not at the same time so embarrassed as to keep one awake from pure vexation. However, I hope it is, that by removing many embarrassments I have at least contributed to procure my reader a sounder nap, than some former writers on these matters have done.

SECTION VIII.

Conservation of Medals.

IN whatever view we regard coins, their perfect preservation is essential. When a medal is in the least defaced in figures, or in legend, the true judge will reject it, hardly excepting even the rarest coins. It suffices with some, however, that the latter be in *good* preservation, or their most eminent parts only a little rubbed. Others of superior taste reject every medal which is not in the *best* preservation, or just as it came from the mint. The excellent cabinet of Robert Austen, Esq. is formed almost entirely of such; and Mr. Walpole's Roman silver at Strawberry-Hill deserve the same praise. But few can go to that expense: yet coins are quite useless if not in *good* preservation at least; for nothing can well be more ridiculous than to see an antiquary poring over a coin, and attempting from two or three remaining letters to make out the lost

legend. This folly is well ridiculed by one of our best novelists in *The Adventures of Peregrine Pickle*, where a virtuoso, in an English farthing, with nothing remaining of the word Britannia but the NI, finds the victory of Severus over Pescennius Niger. Some coins, however, as the Greek or Roman emperors and the Colonial, are reputed to be in good preservation, when the legions can be read, though with some toil. Conservation is also regarded as *good*, or as *perfect*: which last, expressing that the coin is just as it came from the mint, renders even common coins valuable.

Nothing contributes so much to the conservation of brass or copper coins as that fine rust, appearing like varnish, which their lying in a particular soil occasions. Gold admits no rust but iron mould, when lying in a soil impregnated with iron. Silver takes many kinds; but chiefly green and red, which yield to vinegar. For in gold and silver the rust is prejudicial, and to be removed; whereas in brass and copper it is preservative and ornamental; a circumstance remarked by the ancients, as the *pocula adorandae rubiginis* of Juvenal may prove, and that exquisite Greek phrase, which terms patina χαλκοῦ ανθος, ‘the flower of brass.’

This fine rust, which is indeed a natural varnish not imitable by any effort of human art, is sometimes a delicate blue, like that of a turquoise; sometimes of a bronze brown, equal to that observable in ancient statues of bronze, and so highly prized; and sometimes of an exquisite green, a little on the azure hue, which last is the most beautiful of all. It is also found of a fine purple, of olive, and of a cream-colour, or pale yellow; which last is exquisite, and shows the impression to as much advantage, as paper of cream-colour, used in all great foreign presses, does copper-plates and printing. The Neapolitan patina is of a light green; and when free from excrescence or blemish, is very beautiful. Sometimes the purple patina gleams through an upper coat of another colour, with as fine effect as a variegated silk or gem. In a few instances a rust of deeper green is found; and it is sometimes spotted with the red or bronze shade, which gives it quite the appearance of the East-Indian stone called blood-stone. These rusts are all, when the real product of time, as hard as the metal itself, and preserve it much better than any artificial varnish could have done; concealing at the same time not the most minute particle of the impression of the coin.

When medals are found in which the letters are displaced, as is common in those of Claudius Gothicus, their condition is looked upon as dubious, and they are not near so much esteemed as coins without fault. The same may be said of those which, not being well fixed in the dye, have slipped at every stroke of the hammer, and by this means present a double or triple image. Many of these last are found in which the portrait is thus blundered, while the reverse is distinct; and others, of which the portrait is perfectly well struck, while the reverse confuses the eye by its double or triple contours. This must have been owing to that particular half of the dye being mismanaged, in which the fault is found.

There is another blemish of ancient coins, which, notwithstanding, rather recommends them to the curious than otherwise. It is when, after having struck a coin, the workmen through forgetfulness put another into the dye without retiring the first. Hence, the portrait of the other piece being commonly upward, and in the upper part of the dye, the second coin is impressed with it by the dye, and at the same time made hollow on the other side with the form of the portrait already stamped on the former medal.

Some coins are found with a small stamp impressed on a part of them, bearing sometimes a minute head; or some letters, as AVG. or N. PROB. or the like. Such are called *counter-marked* by medallists; and being very rare are the more valued, so that the beginner must not reject such as blemished. These countermarks are thought to infer that an alteration had been made in the value of the coin; as was the case with the countermarked coins of Henry VIII., and of Mary of Scotland in modern times. But as they seldom occur, and are therefore little necessary to be known to a beginner, I shall not enlarge on the subject. Other coins are found with holes pierced through them, and sometimes with a small ring fastened. Such were worn as ornaments of the head, neck, and wrist; either by the ancients themselves, as bearing images of favourite deities, or in modern times, when the Greek girls thus decorate their persons. Coins thus pierced, as the hole is generally made in a blank part, are however the less valued on that account.

Coins of genuine antiquity are often found split on the edges, or even in the middle, by the force of the hammer. But this, far from being regarded as a fault, is looked upon as a great

merit by the collector, it being considered as some additional proof that the coin is of ancient fabric, for even such pieces may be forgeries, effected by means of great force*.

Silver coins often acquire a particular yellow tarnish, which gives them quite the appearance of having been gilt, but it is only owing to their being deposited in a soil, whence a peculiar vapour arises, or the like circumstance. Sulphur gives silver a black tinge; but it will indeed acquire this hue of itself, though kept from all other substances. This metal is peculiarly soft, and susceptible of injury: and the ancients, as appears from their coins, always mixed it with much alloy, in order to harden it. It is even to be wished, that an universal rule were established in all the countries of Europe, to admit a great regulated alloy in

* I am afraid one of these split coins has given rise to an error, with regard to the wife of an emperor, who reigned in Britain with much magnificence: that ascribed to Oriuna, the supposed wife of Carausius. The inscription is read *ORIVNA AVG.* and there is a crack in the medal just before the *O* of Oriuna. Without this crack, I suppose we should have read *FORTVNA AVG.* To give only the bust of a personification, or deity, was the ancient mode in the Roman coinage; and was revived about the time of Alexander Severus.

silver, whether used in coinage or otherwise. For so soft is this metal, that silver coins now become in a few years totally obliterated; whereas the ancient, being strengthened by alloy, retain their impressions. But much alloy is not so necessary in gold, a harder metal, and this reason accounts for the fineness of the ancient gold, and inferiority of the ancient silver, compared with the modern. Gold admits no decomposition of its surface, which is called rust, except by lying in an iron soil, which gives it a rough brown rust, resembling that of iron. Hence gold coins are generally finely preserved, and fresh as they came from the mint.

It may be proper to drop a few hints concerning the method of cleansing coins from any prejudicial rust. Gold is cleaned by any acid: spirit of nitre eats every thing but gold, and is therefore an effectual cleanser of that metal. The green, blue, or red rust, may be removed from silver, by steeping in vinegar for a day or two: but a more effectual way is to boil with a mixture of three parts tartar, and one sea-salt in water. On gold and silver the rust is always in spots, and never forms an entire encrustation, as on brass and copper;

whence it is always regarded as a blemish in the former metals. Very different is the case with brass and copper, and they are never to be cleansed, for coins in these metals would be disesteemed if rendered bright, and would be full of small holes occasioned by the rust. But sometimes brass and copper coins are found wholly obscured with rust; and one of the best ways of clearing them, if used by a skilful hand, is a graver. Another way is to boil in water for twenty-four hours, with three parts tartar, and one part allum (not sea-salt, as in silver), and then cleanse with bran. But it is a dangerous business to cleanse coins; and ought always to be committed to a skilful hand, or let alone.

It is apt to occasion some surprise that ancient coins should be found in such good conservation, as they usually are. A late writer*, in the best chapter of a fanciful work, has endeavoured to account for this. He observes that the chief reason is the custom of the ancients, always to bury one or more coins with their dead, in order to pay Charon for their

* D'Hancarville, *Recherches sur les Arts de la Grece*,
Londre, 1785, 2 vol. 4to.

passage. From Phidon of Argos, to Constantine I., says he, are 36 generations: and from Magna Græcia to the Euphrates, from Cyrene to the Euxine sea, Grecian arts prevailed, and the inhabitants amounted to about thirty millions. There died therefore in that time, and region, not less than ten thousand millions of people; and all had coins of one sort or other buried with them. The tombs were sacred, and untouched; and afterward neglected, till modern curiosity and chance began to disclose them. The urn of Flavia Valentina, in Mr. Townley's capital collection, contained seven brass coins of Antoninus Pius, and Elagabalus. Such are generally black, from being burnt with the dead. The best and freshest coins were used on these occasions, from respect to the dead; and hence their fine conservation. At Syracuse a skeleton was found in a tomb, with a beautiful gold coin in its mouth: and innumerable other examples might be given, for hardly is a funeral urn found without coins. Other incidents also conspire to furnish us with numbers of ancient coins, though the above recited circumstance be the chief cause of perfect conservation. In Sicily the silver coins, with the head of Proserpine, were found in one place in such numbers, as to weigh six hun-

dred French livres, or pounds. In the sixteenth century 60,000 Roman coins were found at Modena, thought to be a military chest, hid after the battle of Bedriacum, when Otho was defeated by Vitellius. Near Brest, in the year 1760, between 20 and 30,000 Roman coins were found*. A treasure of gold coins of Ly-simachus was found at Deva on the Marus†; and Strabo, lib. VII., and Pausan. *in Attic.* tell that he was defeated by the Getæ; at which time this treasure seems to have fallen into their hands.

* D'Hancarville.

† Mem. de l'Acad. des Insc. Tome XXV.

SECTION IX.

*Portraits to be found on them, of which different
Serieses may be arranged.*

THESE portraits ought to be taken in chronological order, and, in this view, the kings of Macedon will have the first rank, as their coins have the greatest antiquity of any yet discovered on which portraits are found. Of these, Alexander I., who began his reign about 501 years before Christ, is the earliest monarch whose medals have yet been discovered; and of course he begins the series.

. Then follow those kings and queens who reigned in Sicily, Caria, Cyprus, Heraclia, and Pontus. To these succeeds the series of kings of Egypt, Syria, the Cimmerian Bosphorus, Thrace, Bithynia, Parthia, Armenia, Damascus, Cappadocia, Paphlagonia, Pergamus, Galatia, Cilicia, Sparta, Pæonia, Epirus, Illyricum, Gaul, and the Alps. This series extends from the time of Alexander the Great to the birth of

Christ, a period of about 330 years. The last series of ancient kings goes down to the fourth century, and includes some of Thrace, the Bosphorus, and Parthia; those of Commagene, Edessa or Osrhoene, Mauretania, and Judæa.

Such are the serieses of the portraits of kings to be found on medals struck with Grecian characters. Of Greek coins, impressed with the heads of illustrious men, a good number may be found, but ought more properly to be called a collection than a series, the latter term always implying a chronological succession.

The Roman emperors present a most distinct series, from Julius, the first of them, to the destruction of Rome by the Goths; nay, to a much later period, were not the coins after this so barbarous as to destroy the beauty of the series, while they add to its perfection.

The forming a series of portraits of the gods, goddesses, &c., to be found on ancient coins, may be looked upon as frivolous. It is far better to arrange these coins under the several cities or kings whose names they bear.

Of modern coins many proper serieses may be

formed, consisting of the kings and other potentates of the different countries. Medals of illustrious men in modern times are not likewise wanting to form a collection.

Having given these hints concerning the portraits found on coins, it may be proper to add some remarks on the portraits themselves, and their ornaments.

The kings, upon Greek coins, have generally the diadem, without any other ornament. The side face is always presented; though upon very ancient Greek coins of cities, and Roman consular coins, full faces are found of amazing relief and expression. Sometimes several heads are found on the same coin, either impressed on both sides, or only upon one. Thus the beautiful gold coin of Ptolemy Philadelphus, king of Egypt, bears his own head, and that of Arsinoe his queen, on one side; and those of his father and mother, Ptolemy I. and Berenice, on the other. A copper coin of Tigranes the Younger, of Armenia, has his head on one side, and his sister's on the other. So are found coins of Antony and Cleopatra, Nero and Agrippina, Agrippina and Germanicus, and many others, both Greek and

Roman. Sometimes two, or more, heads are found upon one side, while the other bears a reverse in the usual way. These heads are either *adverse*, that is opposite to each other, face to face; or *joined*, and both looking one way. Of the adverse are coins of Licinius, father and son, and others; but I recollect no example of it in the more ancient and finer coins. Joined heads are found on the finest Greek coins, as in that of Ptolemy above mentioned; and in the Roman are Commodus and Marcia his concubine, with others. Sometimes real portraits are joined with ideal ones, as Carausius and Apollo, Postumus and Hercules; and the like. Sometimes three heads are found upon one side, as in the invaluable Persian coin, engraved in Plate I.; that of Valerian, with his sons Gallienus and Valerian; of Otacilia, with her husband and son. All such coins are of the greatest rarity and value.

Passing to the ornaments of portraits, the chief is the diadem, or *vitta*, which was a ribbon worn about the head, and tied in a floating knot behind, anciently the simple, but superlative badge of kingly power. It is observable upon the Greek monarchic medals, from the earliest ages to the last; and is almost an infallible sign

of the portrait of a prince. In the Roman coins it is seen on the consular ones with Numa and Ancus; but never after, if I am not mistaken, till the time of Licinius*. So great an aversion had the Romans to this kingly distinction, that their emperors had, for more than two centuries, worn the radiated crown, peculiar to the gods, before they dared to assume this tyrannic badge. In the family of Constantine the diadem becomes common, though not with the ancient simplicity, being ornamented on either edge with a row of pearls, and various other decorations.

The radiated crown, at first, as on the posthumous coins of Augustus, a mark of deification, was, in little more than a century after, put upon most of the emperor's heads in their several medals.

The crown of laurel was at first the honorary prize of conquerors; but afterward commonly worn, at least in their medals, by all the Roman emperors from Julius, who was permitted by the senate to wear it always, to hide

* Mr. Gibbon says Diocletian first wore the diadem, but he never appears with it on his coins: nor do Maximian I., Constantius I., Carausius, Severus II., nor Maximian II,

the baldness of his forehead. This perhaps gave rise to the first emperors always appearing with it on their coins, a circumstance continued to our times, with a most risible and truly Celtic absurdity. The laurel, employed by the ancients in forming their crowns, is apparently what we term the Alexandrian laurel, a most beautiful evergreen, of a fine and tender verdure. In the lower empire the laurel is often held by a hand above the head, as a mark of piety.

Agrippa appears on his coins with the rostral crown, a sign of naval victory or command, being made of gold, in resemblance of prows of ships tied together. He is likewise seen with the mural or turreted crown, the prize of first ascending the walls of an enemy's city.

The oaken, or civic crown, is frequent on reverses, as of Galba, and others; and was the badge of having saved the life of a citizen, or of many citizens.

Besides the diadem, the Greek princes sometimes appear with the laurel crown. The Arsacidæ, or kings of Parthia, wear a kind of sash round the head, with their hair in rows of curls like a wig. Tigranes, and the kings of

Armenia, wear the *tiara*, a singular kind of cap, but the well-known badge of imperial power in the ancient eastern world. Xerxes, a petty prince of Armenia, appears in a coin extant of him in a conic cap, with a diadem around it. Juba the father has a singular crown, like a conic cap all hung with pearls.

The successors of Alexander assumed, by way of distinction, different symbols of deity to be observed on the busts of their medals. Such as the lion's skin of Hercules, which surrounds the head of the first Seleucus; the horn placed behind the ear, an image of their strength and power, or of their being the successors of Alexander, called the son of Jupiter Ammon; the wing placed, in like manner, behind the ear, symbolic of the rapidity of their conquests, or of their descent from the god Mercury; and the like.

But it is doubted if all these heads be not of gods, except those with the horn*. Pyrrhus,

* Eckhel observes that even the horn and diadem belong to Bacchus, as on a coin of Nuceria Alfaterna. Bacchus invented the diadem to cure his head-achs, Diod. Sic. iv. He was horned like his father Jupiter Ammon: Ib. iii. The only king who appears on coins with the horn, is Lysimachus, according to Eckhel.

as Plutarch informs us in his life, had a crest of goats' horns to his helmet: and the goat was a symbol of Macedon, the reason of which Justin explains. Perhaps the successors of Alexander took this badge of the horn in consequence.

The helmet also appears on coins; as in those of Macedon under the Romans, which have a head of Alexander, sometimes covered with a helmet. Probus also has often the helmet in his coins: and Constantine I. has helmets of different forms, curiously ornamented,

The Greek queens have the vitta or diadem. Most queens of Egypt have the sceptre. It appears at the top of their head; and would seem part of the head-dress, were it not that in other coins it passes beneath the neck transversely, so that both ends appear. Orodatis, daughter of Lycomedes, King of Bithynia, has a diadem on the very rare brass coin of her, published by Neuman*. The Roman empresses never appear with the diadem; but the variety of their head-dresses more than compensates for the want of this ornament. The remarkable part of the Roman head-dress among the ladies, was the *sphendona* or sling, on

* Pop. et Reg. Numi, Vindob. 1779.

the crown of the head; answering to the modern hair-cushion. But it was of gold; and so prominent as to be even remarkable in a coin. The hair appears in many fashions, as now. Sometimes the bust of an empress is supported by a crescent; to imply that she was the moon, as her husband was the sun, of the state.

Beside the distinctions of supreme power, or honorary reward, there are other symbolic ornaments of the head, observable on some Roman coins, which ought to be mentioned. Such is the veil, or more properly the *toga* drawn over the head, to be seen on the busts of Julius Cæsar, when pontifex maximus, and others. This shows that the person bore the pontificate or the augurship; the augurs having a particular gown, called *laena*, with which they covered their heads, when employed in observing omens. Latterly the veil is only a mark of consecration; and is common in coins of empresses, as Faustina, Mariniana, and others. In the coins of Claudius Gothicus we first find it, as a mark of the consecration of an emperor; and it is continued in those of Constantius I., Maximian I., and Constantine I. All such coins rank with those that are valuable from rarity.

The *nimbus* or *glory*, now peculiar to the saints, was formerly applied to emperors. A nimbus appears round the head of Constantine II. in a gold coin of that prince; and of Flavia Maxima Fausta, in a gold medallion; and of Justinian in another. But the idea is as ancient as the reign of Augustus; and is found in Roman authors, before it appeared on coins*. Oiselius gives a coin of Antoninus Pius with the *nimbus*, but it seems doubtful if it was not merely some flaw in the coin. Havercamp gives a singular coin which has upon the reverse of the common piece with the head of Rome, VRBS ROMA, in large brass, Constantine I. sitting amid Victories and Genii, with a triple crown upon his head for Europe, Asia, and Africa: legend SECVRITAS ROMA †. This medal might haply have afforded a curious argument, in an ignorant age, for

* An ancient author, speaking of Augustus entering Rome after his victory over Antony, says, “Curvatus aequaliter
“rotundatusque in colorem arcus, veluti coronam tanto mox
“viro imponens.” Mamertinus in his panegyric of Maximian mentions, “illa lux divinum verticem claro orbe
“complectens.” Nay, Virgil has

— Nimbo effulgens, et Gorgone sæva. Æn. II. 616.

† Nummophylacium Christinae, Hagæ, 1742, fol.

Constantine's donation to the Pope; and for the papal triple crown. But in fact the universal spiritual power of the Pope was totally unknown till the twelfth century; before which time his election was obliged to be confirmed by the Exarch of Ravenna, and after by the emperor of Germany: and his temporal power is so late as the beginning of the sixteenth, only commencing in the crimes of Borgia.

Generally only the bust is given on ancient coins, but sometimes half the body, or more: in which latter case, the hands often appear with tokens of majesty in them. Such is the globe, said to have been introduced by Augustus, to express possession of the world*. The sceptre, sometimes confounded with the consular staff. The roll of parchment, symbolic of legislative power: and the handkerchief, expressing that of the public games, where the emperor gave the signal. Some princes even hold the thunderbolt, showing that their power on earth was equal to that of Jupiter in heaven. Others hold an image of Victory.

* Isidor. Orig. xviii. 3.

SECTION X.

The Reverses of Medals.

AS that side of the coin on which any portrait is delineated is commonly termed the *face*, or *obverse*, so the opposite side is termed the *reverse*.

These reverses, in the ancient Greek and Roman coins, are of infinite variety, and afford one of the chief amusements arising from this study. They contain figures of deities, at whole length, with their attributes and symbols; public buildings, and diversions; allegorical representations; ceremonies, civil and religious; historical and private events; figures of ancient statues; plants, animals, and other subjects of natural history; ancient magistracies, with their insignia; in short, almost every object of nature or art.

Some reverses bear the portrait of the queen,

the son, or the daughter, of the prince who appears on the obverse. Such are esteemed highly by antiquaries, not only because it is a rule with them that every coin stamped with portraits on either side is very valuable; but because they identify the personage on the reverse to have been the wife, the son, or the daughter, of such a particular prince, and by this means help in the adjusting of a series. Some however with two portraits are common, as Augustus reverse of Caligula, and M. Aurelius reverse of Antoninus Pius.

The reverses of the Roman coins have more of art and design than the Greek; but, in return, the Greek have more exquisite relief and workmanship than the other.

In the very ancient coins, no reverse is found, save a rude mark struck into the metal, as of an instrument with four blunt points on which the coin was struck. This was owing to the medal being merely fixed firm on that side, that it might receive the impression upon the other. By degrees however we see some little image of a dolphin, or other animal, inserted into one of the departments of the rude mark, or into a hollow square. Then follows a perfect reverse

of a horse, or the like, with a slight mark, and at length without any mark, of the hollow square. Such is the progress of the reverses of coins from rudeness to design, which was soon after carried to refinement.

Some ancient Greek reverses are struck in *intaglio* not in *cameo*, hollow not in relief. Such are those of Caulonia, Crotona, Metapontum, and some other ancient cities of Græcia Magna. These reverses sometimes bear the same type in *intaglio*, that the obverse has in *cameo*: and sometimes are quite different. When complete reverses appear on the Greek coins, about 500 years before Christ, they are of exquisite relief, minute finish, and beauty. The very muscles of men and animals are seen, and will bear inspection with the largest magnifier, as ancient gems. The ancients certainly had not eyes different from ours; and it is clear that they must have magnified objects. A drop of water forms a microscope, and it is probable was the only one of the ancients. To Greek artists we are indebted for the beauty of the Roman imperial coins; and these are so finely finished, that on some reverses, as that of Nero's decursion, the *adventus* and *progressio* of various emperors, the *fundator pacis* of Severus,

the features of the emperor riding, or walking, are as exact as on the obverse. But though the best Greek artists were called to Rome, yet the Greek coins under the Roman emperors are sometimes well executed, and always full of variety and curiosity.

No Roman or Etruscan coins have been found of the globular form, or indented on the reverse, like the early Greek. The first Greek are small pieces of silver, while the Roman are large masses of copper. The former are struck; the latter cast in moulds. Of Roman coins the reverses are very uniform, the prow of a ship, a ear, or the like, till about 100 years before our æra, when various reverses appear on their consular coins in all metals. The variety and beauty of the Roman imperial reverses are well known. The medallist much values those which have a number of figures, as the *Puellæ Faustinianæ* of Faustina, a gold coin no larger than a six-pence, which has twelve figures. That of Trajan, *Regna Adsignata*, has four. The *Congiarium* of Nerva, five. The Allocution of Trajan, seven: of Hadrian ten: of Probus twelve. Some Roman medals have small figures on both sides, as the *Apolloni Sancto* of Julian II. Such have not received

any peculiar name among medallists. Others have only a reverse, as the noted *spintriat*, which have numerals I. II. &c., on the obverse.

The figures of deities and personifications, on the Roman coins, are commonly attended with their names, besides being distinguished by their attributes. These names when without any adjunct, as they sometimes stand, may be safely looked upon as put down merely because it was necessary the coin should have a legend. Thus, in a coin of Lucilla, Venus, though well known by the apple which she always holds in her hand, has yet the name round her, VENVS, without any addition whatever. The like may be observed in a few other instances: But most commonly an adjunct is added, which renders the insertion of the name very proper and necessary, as in the instance of a Neptune, with NEPTVNO REDVCI; a Venus, with VENNERI VICTRICI; and others similar. The like may be said of the coins with a figure of Modesty, PVDICITIAE AVGVSTAE; of Virtue, VIRTVS AVGVSTI; and others of the same kind: for it is the legend which appropriates the virtue to the emperor or empress, and thus leaves no doubt as to the meaning of the re-

verse;—a quality not so often observed on modern medals, which are frequently dark as a riddle; and it seems to be the intention of the designer to make the legend and reverse fight a combat together, and obscure, not illustrate, each other's meaning.

In the Greek coins, however, perhaps it is a superior delicacy that the name of the deity is never expressed, but left to the easy interpretation of six symbols. This remarkable difference is observable in the earliest coins of the two countries, and on which only the bust of the deity or personification is given. The Roman have almost always the name, as PIETAS, LIBERTAS, &c.; while the Greeks content themselves with giving us Ceres with her wheaten garland; Jupiter with his mild countenance, laurel crown, and beard; Minerva with her helmet, and so forth. This practice of the Greeks makes it necessary to present my reader, in the next section, with some account of the symbols most observable on their coins*, that

* When I speak of *the Greek coins*, absolutely throughout this work, those preceding the imperial ages of Rome are meant: yet the present list of symbols applies in a great degree to the Greek imperial coins.

when he meets with them he may easily know the deity they distinguish. This he will find the more convenient, as hitherto medallist writers have thought proper to give us explanations of the Roman symbols, without bestowing any particular attention on the Greek. In this they have acted like those profound commentators, who leave obscure passages as they found them, but illustrate those which every body understands with much labour and success. They may argue indeed, that the symbols of the deities have a degree of similarity in the coins of both nations; yet I must reply that these symbols stand alone on the Greek, and of consequence the Grecian medals ought to have attracted their chief attention in this way; and not the Roman, on which the attributes of a deity are immediately appropriated by the legend.

SECTION XI.

Symbols observable on them.

THIS section shall begin with some account of the symbols to be found on the Greek coins, and shall conclude with those very few on the Roman which are not immediately illustrated by the legend of the medal.

The principal deities symbolised on the Greek coins, as divided into male and female, will stand thus :—

I. The first rank of the gods must be given to **JUPITER**. He occurs frequently on reverses of Alexander the Great, and is easily known by his eagle and thunder-bolt. When the bust only occurs on obverses of coins, it is known by the laurel crown, and placid bearded countenance. Jupiter Ammon is distinguished by the ram's horn twisting round his ear ; a symbol of power and strength afterward whimsically adopted

by one or two of the successors of Alexander the supposed son of Ammon, and particularly by Lysimachus.

II. NEPTUNE seldom occurs on the coins of Greece. When he appears he is well known by the trident, or the dolphin: and is sometimes drawn by sea-horses. His bust has a trident behind.

III. APOLLO is frequent on the reverses of the Syrian princes; and is known by the harp, the branch of laurel, or the tripod; sometimes he has a bow and arrows. When the bust only occurs, he has a fair young face, and is crowned with laurel; and, in the character of the sun, his head is surrounded with rays.

IV. MARS, often seen on Greek civic medals, is distinguishable by his armour, and sometimes by a trophy on his shoulders. The bust is known by the helmet, and ferocious countenance.

V. MERCURY appears with the *caduceus*, or wand twined with serpents, and the *marsupium*, or purse, which he holds in his hand. He is delineated as a youth with a small cap on his head,

and wings behind his ears and at his feet. The bust is known by the cap, which resembles a small hat, and the wings,

VI. *ÆSCULAPIUS* is remarkable by his bushy beard, and his leaning on a club with a serpent twisted round it. He sometimes occurs with his wife *Hygeia*, or Health, and their little son *Telesphorus*, or Convalescence, between them.

VII. The attributes of *BACCHUS* are, the tiger, the satyrs around him, the *thyrsus* or rod twisted with ivy or vine, and the crown composed of one of these plants. His bust is distinguishable by the latter symbol; and by the diadem, and horn.

VIII. The club, lion's skin, and sinewy strength, reveal *HERCULES*: sometimes a cup is added, to imply that wine inspires courage; and the poplar tree, symbolic of vigour. He often appears as breaking the neck of the Nemæan lion, by crushing it stoutly in his arms. His bust is common on the obverse of coins of Alexander the Great, and other princes; as also on those of some Sicilian cities, as Messina, and others: it is that of a youth without a beard; with the lion's skin wrapt around it; and on the

coins of Alexander has been falsely taken for the portrait of that prince. He likewise is sometimes drawn with a beard, in which case he is called the Old Hercules; as, when he appears beardless, he is denominated the Young Hercules.

IX. SERAPIS, one of the fantastic gods of Egypt, is known by his bushy beard, and the measure upon his head. APIS appears as a bull with a flower of the λωτος, the water-lily of the Nile, where Herodotus marks it to have grown in his time*, as it does still. Macrobius says it was a symbol of creation: and Iamblichus tells that Osiris was supposed to have his throne in it. The singular appearance of this beautiful plant, growing in water, seems to have occasioned a veneration to it, founded perhaps on the ancient philosophy, which made water the parent of all things.

X. HARPOCRATES, the god of silence, is evi-

* Φυεται εν τω υδατι κρινεα πολλα, τα Αιγυπτιοι καλεουσι λωτον. *Her. Euterpe*. — This lotus must not be confounded with the lotus, or nettle-tree, so called from the form of its leaf, but whose flower resembles a rose in shape and fragrance. Whence Anacreon —

Επι λωτιναις τε ποιαις.

Nor with lotus, the fruit of a shrub, whence *lotophagi*.

dent from the familiar token of putting his finger to his mouth. Sometimes he has the sistrum in his left hand, which is a symbol common to most of the Egyptian deities.

XI. CANOPUS is very common on the coins of Egypt, in the singular shape of a human head, placed upon a kind of pitcher. This deified pitcher seems to refer to an anecdote of ancient superstition, which, I believe, is recorded by Plutarch. It seems, some Persian and Egyptian priests had a contest which of their deities had the superiority. The Egyptian said that a single vase, sacred to Serapis, would extinguish the whole power of the Persian deity of fire. The experiment was tried, and the wily Egyptian boring holes in the side of the vase, and stopping them with wax, afterward filled the vessel with water, which, gushing through the holes, as the wax melted, extinguished the Persian deity. Hence the vase was deified; and certainly deserved it better than the onions and leeks of that learned and foolish nation, so well ridiculed by Juvenal:—

O sanctas gentes quibus nascuntur in hortis
Numina!

XII. This list of symbolised gods shall be

closed with the **ΙΕΡΑ ΣΥΝΚΑΗΤΟΣ**, and **ΙΕΡΟΣ ΔΗΜΟΣ**, the HOLY SENATE, and the HOLY PEOPLE, so frequent on Greek imperial coins. These ideal persons are commonly seen in the same image of an ancient bearded head, crowned with laurel; sometimes, however, both appear as youths.

Passing to the female deities, or goddesses, the first in dignity is,

I. **JUNO**, known by the peacock, a bird sacred to her from the fable of Argus. When she appears as the goddess of marriage, she is veiled to the middle, and sometimes to the toes. Her bust is that of a beautiful young woman, sometimes without any badge, which is distinction sufficient, as the rest of the goddesses have badges; and sometimes with a diadem.

II. The symbols of **MINERVA** are very remarkable, consisting of her being in armour, with a spear in her right hand, and the ægis, or shield with Medusa's head, in the other; an owl commonly standing beside her. Her bust is equally distinguishable from the helmet which she always wears: it is very common on the gold coin of Alexander the Great; and one can-

not help laughing at the odd blunder of Elzevir, or his editor, who, misled by Le Pois, in the best edition of Quintus Curtius, gave an head of this goddess for that of Alexander. Le Brun the French painter has fallen into the same error in his battles of Alexander.

III. DIANA is revealed by the crescent, by her bow and arrows, and often by her hounds. The Ephesian Diana, common upon Greek imperial coins, appears with a number of *mammæ*, being supposed the same with Universal Nature: she is supported by a couple of deer, and bears a pannier of fruit on her head. The bust of Diana is known by the crescent on her brow, and sometimes by the bow, or quiver, engraven on one side.

IV. The apple in her hand, the prize of beauty, declares VENUS. Sometimes she is only to be known by her total want of dress, without any other symbol. Her bust is distinguishable by her supreme beauty, and is often adorned with pearls around the neck. It might have been mentioned above, that CUPID sometimes appears on the Syrian coins, in half-length, as painters call it, and is known by his infancy and wings.

V. CYBELE has the turreted crown, and lion ; or is seen in a chariot drawn by lions. Her bust is known by the first-mentioned attribute.

VI. CERES has the torches in her hands, with which she is fabled to have gone in search of her daughter Proserpine. She has sometimes two serpents by her, and is sometimes drawn in a chariot by them. Her bust is readily known by the wheaten garland ; and is most common on coins of Sicily, an island celebrated for its fertility. Her daughter Proserpine is also common with the name KOPH, or the *girl*.

VII. ISIS, an Egyptian goddess, has the sistrum in her hand, and a bud, or flower, on her head, symbolic of the eternal bloom of the inhabitants of heaven*. The flower is said to be that of the *αβροτονον*, or southernwood, which is not very likely : it would rather seem to be that of a species of amaranth.

VIII. ASTARTE, a Sidonian goddess, appears on a globe, supported by a chariot of two wheels, and drawn by two horses.

Deities less frequent on Greek coins are Saturn

* Plutarch de Iside.

with his scythe, or his bust with a hook on those of Heraclea. Vulcan's head, with his tongs: on a reverse of Thyatira he appears at work in presence of Minerva. Adranus, a Sicilian god, with his dog. Anubis of Egypt, with his dog's head. Atis in the Phrygian bonnet. Castor and Pollux, with a star on the head of each. Dis has an old face with dishevelled hair and beard, and a hook. Flora, crowned with flowers, on coins of Marseilles. Nemesis with a wheel. Pan with small horns, and brute's ears.

These are the more eminent symbols and attributes of the deities: there only remain to be mentioned a few symbols, which stand by themselves, as figurative of persons or circumstances.

Such are vases, with sprigs of plants issuing out of them, symbolic of solemn games. The small chest, or hamper, with a serpent leaping out of it, shows the mystic rites of Bacchus. Coins with the latter image are called *cistophori*; and a learned treatise has been published concerning them.

The anchor on Seleucian medals marks the coin to be struck at Antioch, where an anchor

was found upon digging the first foundation of the city, though at a considerable distance from the sea.

In different coins of the princes of Syria, Apollo sits upon a singular seat, appearing like a hamper inverted. This seat is perhaps only a tripod, with a covering woven in net-work thrown over it; for to throw a veil over any thing anciently denoted its appropriation to sanctity, and its being to be kept secret from profane eyes. The tripod is also often seen uncovered on Syrian coins. Some think this seat is that upon which the priest of Apollo at Daphne, near Antioch, used to sit to return oracles. It was placed over an aperture of the floor of the temple, through which the gale of inspiration was thought to arise.

The bee is a mark of Aristeus, son of Apollo and Cyrene, much worshipped in the isles of the Adriatic and Aegean seas. The laurel of Apollo the reed of a river: ivy and grapes of Bacchus: the poppy of Ceres and of Proserpine: corn of Ceres: owl and olive of Minerva: dove of Venus: torch of Diana, Ceres, or Proserpine. The *μυδρος*, *mudrus*, or conic stone, was a token of the sun, of Belus, of Venus.

The most remarkable symbols of countries and cities on Greek coins are the flowers of the pomegranate for Rhodes; owl for Athens; pegasus for Corinth; wolf's head for Argos; bull's head for Bœotia; minotaur's head, and the labyrinth, for Crete; horse's head for Pharsalia; lion for Marseilles; tortoise for Peloponnesus; sphinx for Scio; three legs joined, as in our isle of Man money, for Sicily; a horse for Thessaly. Others need not be explained, as the legend marks the name of the country or town. But the badge of Byzantium deserves notice, as it has had a singular fate. It is the crescent; and appears on early coins of Byzantium, with the legend, **BYZANTINH ΣΩΤ.** 'The preserver of Byzantium:' for when Philip of Macedon besieged it, and was going to storm it in a cloudy night, the moon shone out, and discovered his approach, so that the inhabitants observed and repulsed him. The Turks upon entering Constantinople found this ancient badge in many places; and suspecting some magical power in it, assumed the symbol and its power to themselves; so that the crescent is now the chief Turkish ensign.

Though the bull is very frequent on Greek

coins*, medallists are not thoroughly agreed as to its signification. But the more probable opinion is, that it is the symbol of a river, on which the country or town was. The river Achelous is called βουκρανος, or 'bull-headed,' by Sophocles, in *Trachin*, v. 13; and Cephissus is said to have ταυρομορφον ομμα Κηφισου πατρος by Euripides, *Ion*. v. 1261. The Latin poets also speak of the horns of rivers; as Claudian of the Po,

Aurea roranti micuerunt cornua vultu.

De 6 cons. Hon. 162.

of the Danube,

————— vel cornua fregimus Istri.

Bell. Get. 603.

Horace of the Aufidus,

Sic tauriformis volvitur Aufidus,

and many other examples might be given. The bull was a token of fertility; but the horns seem to allude to the force of the stream: and when the bull is represented pushing, or enraged, it would appear to denote a rapid river. Mr. D'Hancarville fondly assimilates this symbol with the cow, held in devotion by the bramins,

* The bull with a human face is the minotaur.

who live much on milk ; and with the bull worshipped in Japan, never reflecting that symbols are arbitrary, and, like words, express very different ideas among different nations.

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Having discussed the most remarkable symbols observed on Greek coins, let us examine a very few of the Roman, which stand alone, and require explanation ; for the deities and personification of the Roman coins, as has been said, have not only attributes, but their name likewise, in the legend of the medal, which renders it quite unnecessary to dwell upon them.

On the reverses of Roman colonial coins, which are often easily known from their rude fabric, and the name of the colony on them, commonly beginning with COL. when an ensign stands alone, and without any persons, it shows a colony drawn from one legion. When many ensigns or banners appear in the like circumstances, they evince the colony to have been drawn from as many legions as there are ensigns.

A bull often represents Apis, and is often a symbol of strength and security. Which of these is meant in the common coin of Julian, in

middle brass, esteemed large brass in that age, when no larger was coined, upon the reverse of which is a bull, with two stars over him, and the legend *SECVRITAS REIPVB*. I will not say. But as Julian's devotion to Egyptian deities was great, it is in all probability Apis.

The caduceus marks peace and concord ; the cornucopia, abundance ; the pontifical hat, the priesthood. They all appear upon a reverse of Julius, and are symbols of the concord of the empire, and the plenty which attended his power. The last symbol only denotes that Cæsar was pontifex maximus, not his attention to religion, as Pere Jobert religiously explains it.

The *parazonium*, observable on Roman coins, was a baton of command, and not a pointless dagger, as many antiquaries describe it to have been. This is evident from a reverse of Galba, *HONOS ET VIRTUS*, and other circumstances ; it being always held as a baton, not placed by the side, or held by the handle, as a dagger. Why no Roman emperor, or soldier, appears on their coins with a sword by his side, can never be explained by antiquaries ; much less why that weapon is never seen on their coins.

In later times, the globe on an altar with three stars, is supposed to typify the world preserved by the gods for the three sons of Constantine I. The fort and the gate are symbols of security. A rare coin of Licinius has a kind of *cheveux de frize*, with a man standing on it. Procopius* mentions this kind of work, anciently called *tribuli*: “ they place, says he, “ four pieces of wood of equal length, so as, “ crossing each other, they form triangles on “ every side, and throw them on the ground. “ Thus three ends stand fixt in the soil, while “ the fourth is erect as a barrier against man or “ horse.”

The altar is a well-known mark of piety. The tripod was a portable altar, used in temples for liquid offerings, as the altar was for solid sacrifice. A dolphin is sometimes twined among the legs of the tripod. From Servius on Eneid III., it appears that this dolphin was sacred to Apollo; and the day before sacrifice was offered by the quindecimviri, a dolphin was carried about as a symbol; because says he the quindecimviri kept the Sibylline books, and the Sibyl spoke by Apollo's inspiration, and the dol-

* Vandal. III. 24.

phin is sacred to Apollo. Perhaps the story of Arion led the ancients to dedicate the dolphin to Apollo, the god of poetry and music. But this is mentioned to rectify Jobert, Monaldini, and other medallic writers, who uniformly regard the dolphin as a badge of Neptune and the marine gods. The *lectisternia* also appear in medals; and were little beds on which the statues of the gods were reclined, when a festival was prepared in their honour, and of which they were supposed to be partakers.

The instruments of sacrifice appear on many Roman coins, and are, 1. The *secespita*, or an oblong hatchet, or large knife, to kill the victim; 2. *aspersorium*, or vessel for holy water, with which the priest sprinkled the assistants; 3. *simpullum*, or the vessel for pouring wine on the sacrifice; 4. *patina*, or *patera*, a dish for the fat, and other portions sacred to the gods; 5. *acerra*, a little coffer of incense.

The *lituus*, or wand twisted round at the top, something like an episcopal staff, is a badge of the augurship; as the *apex* or cap with strings, and terminating with a tuft, is of the pontificate. By the bye the *lituus*, in some coins of Nero, appears at his breast; and from badly

preserved coins has been taken by some medallic writers for a serpent; as in Egyptian medals, of the same prince, they take the fastening of his armour, or chlamys, for a serpent. In Dr. Hunter's cabinet are both sorts well preserved; and there is no serpent to be seen. It is always to be wished that medallists would not judge from coins ill preserved; but reserve their opinions till they have better evidence.

The *thensa*, or divine chariot, which carried the image of a deity in sacred processions (improperly termed *carpentum* by some), is a badge of consecration of an empress; as is the peacock, which was the bird of Juno, the queen of heaven. These sometimes appear without the legend *consecratio*, as the *thensa* on a coin struck under Tiberius for the consecration of Livia*, the wife of Augustus, S. P. Q. R. IVLIAE AVGVST.; and the peacock on that most rare gold coin of Julia, the daughter of Titus, the front of which has her bust, IVLIA AVGVSTA, and the reverse a peacock, DIVI TITI FILIA. The eagle is the sign of consecration of an emperor.

* It is well known that Livia took the name of Julia after her high marriage.

The palm-tree, on both Greek and Roman coins, is symbolic of Phœnicia, where that tree flourished: as the *silphium* is of Cyrene, from the earliest times down to those of the Roman empire.

SECTION XII.

Their Legends.

MOST coins, along with the portrait in front, and various figures in the reverse, have likewise words, explicative of some circumstance concerning them, marked on one or both sides. The early Greek coins of cities commonly only contain the name of the city, or the initial letters of it; as those of the Greek princes their name, the beginning characters of it, or its monogram*. But in the Roman and Greek imperial medals there is sometimes not only a literal information around the face, and around the reverse, but likewise in the field of the reverse, which in such instances often consists wholly of this intelligence, without any figures whatever. When the letters

* A monogram, with medallists, is the name of a prince, city, or the like, of which the characters are woven together, so to speak, and the limb of one character perhaps applies to three or four others; so that in the small room of one or two characters a whole name is comprehended.

or words of a medal thus occupy the field, they are called an *inscription*; but when they run round the margin, are on either side of the figures, or upon the exergue*, they are denominated a *legend*.

The French, who are fond of devices, call the figures the *body*, and the legend the *soul*, of a medal.

The legends of the earliest Greek coins, as above observed, are very brief, rehearsing only the initials of the city, or prince; as ΑΘΕ, Money of Athens; ΣΥ, Money of Sybaris; ΜΑΣ, Money of Massilia. Nay, afterwards Α, Money of Archilaus king of Macedon; Φ, Money of Philip. At length the name is put at full length, as ΣΥΡΑΚΟΥΣΙΩΝ, Coin of the Syracusians; ΦΙΛΙΠΠΙΟΥ, Coin of Philip of Macedon. Alexander the Great has the title of ΒΑΣΙΛΕΥΣ, or king; and in process of time the Syrian and Egyptian kings, successors of Alexander, added some epithet which did them praise, as

* The exergue is the bottom of a coin, commonly separated from the field by a line, upon which the figures of the reverse stand. It is so called from being ἐξέρχεται, *out of the work of the medal*.

ΕΥΕΡΓΕΤΗΣ, Beneficent, or the like; and the year of their æra in which the coin was struck. Such the Greek coinage remained till the universality of the Roman empire swallowed up all the kingdoms and cities which used that language.

Under the dominion of the Roman emperors the Grecian mint assumed more of the Roman form, then indeed more perfect, as to legend, than their own. On the face they gave the Roman emperor, or empress, with their titles; the founder of their city, with his name; the senate, or the people of Rome, who had protected them; or the ideal bust of the genius of their city: while the reverse presents us with a legend indicative of the name of the magistrate under whom the money was struck; of some treaty entered into with one or more neighbouring states; of the river, or deity, represented; and the like. Yet it must be observed, to the credit of the Greek artists, even when their genius was depressed by the Roman power, that they seldom or never explain by their legends the reverses of their coins, but leave it to the spectator; commonly, and almost universally, putting for the legend of the reverse the name of the city, and frequently

adding that of the magistrate. The symbols of the deities were indeed so familiar as to require no explanatory legend; and personifications are rather rare in Greek coins, except those of their cities and rivers. Instances however occur of them, and they are commonly accompanied by an illustrative legend; as on the reverse of a very rare Otho, where we see his victory over Galba, imagined by a placid female figure, with a victory in one hand, and a trophy in the other, with this legend, ΚΡΑΣΙΣ, Moderation*. But others read ΚΡΑΤΗΣΙΣ, Victory. The Egyptian coins under the Roman emperors have often legends, like the Roman, illustrative of personifications, as ΝΕΙΛΟΣ, The Nile; ΕΙΡΗΝΗ, Peace; and the like.

To give a few more illustrations of Greek legends. Some of those on the regal coins are modest enough, as ΔΙΚΑΙΟΥ, Just; ΕΠΙΦΑΝΟΥΣ, Illustrious; ΕΥΕΡΓΕΤΟΥ, Beneficent; ΕΥΠΑΤΟΡΟΣ, Born of a good father; ΕΥΣΕΒΟΥΣ, Pious; ΘΕΟΣΕΒΟΥΣ, Worshipper of God; ΚΑΛΑΙΝΙΚΟΥ, An able conqueror; ΝΙΚΑΤΟΡΟΣ, Conqueror; ΝΙΚΗΦΟΡΟΥ, Bearer of

* Spon, Voyage du Levant, Tome III.

victory; **ΣΩΤΗΡΟΣ**, Saviour; **ΦΙΛΑΔΕΛΦΟΥ**, Lover of his brother; **ΦΙΛΟΜΗΤΟΡΟΣ**, Lover of his mother; **ΦΙΛΟΠΑΤΟΡΟΣ**, Lover of his father; **ΦΙΛΕΛΛΗΝΟΣ**, Lover of the Greeks; and latterly Ariobarzanes and Ariarathes, kings of Cappadocia, and Mannus king of Arabia, bear **ΦΙΛΟΡΩΜΑΙΟΥ**, Lover of the Romans; in imitation evidently of the Parthian kings, who call themselves Lovers of the Greeks. . By the bye it has been lately observed*, that the Parthians were a Sarmatic or Slavonic nation, who had burst into Persia from the north; and it is remarkable that this phrase is a Slavonism, for many successive kings of Bohemia took the name of Ottocarus, or Lovers of Otho, after they espoused the party of Otho IV., the emperor, 1199†. But a few of the Grecian regal coins bear titles not a little proud, as **ΜΕΓΑΛΟΥ**, Great; nay **ΔΙΟΝΥΣΟΥ**, Bacchus, as equalling that god in youth and beauty; **ΘΕΟΠΑΤΟΡΟΣ**, Whose father is a god; **ΘΕΟΥ**, A god; **ΜΙΘΡΑΙΟΥ**, Cotemporary of Mithras or the sun; not to

* Dissertation on the Origin and Progress of the Scythians or Goths, p. 36, 38.

† Voltaire, *Annal. de l'Emp.* and the old German historians.

speak of the famous ΒΑΣΙΛΕΩΣ ΒΑΣΙΛΕΩΝ, or king of kings, common upon the Parthian coins, and also to be found on those of Tigranes, king of Armenia, and of Pharnace, king of Pontus and Bosphorus Cimmerius.

The Grecian coins of cities seldom express more in their legends, than barely the name of the town; and even that generally contracted, till the Roman times. Some few pieces of large size bear the name of a magistrate, but such are rare. Sometimes the civic coins bear marks of extraneous power; as when Athens fell into the hands of Mithridates, the coins have ΕΙΗ ΜΙΘΡΑΔΑΤΟΥ, ‘ Under Mithradates.’

But after the Roman empire swallowed up the Grecian, the legends on Greek coins become generally as remarkable for length, as before for brevity. Though the Greek imperial coins are commonly of mean execution, the best Greek artists being employed at Rome, yet they compensate for this defect, by their curiosity and variety, and therefore a few illustrations of their legends shall be here given. The emperors’ titles are as literally translated from the Latin as possible. Emperor is put ΑΥΤΟΚΡΑΤΩΡ;

Cæsar, ΚΑΙΣΑΡ; which is the real Roman pronunciation. Augustus is ΣΕΒΑΣΤΟΣ, and sometimes even ΑΥΓΟΥΣΤΟΣ; Censor is ΤΕΙΜΗΤΗΣ; Consul, ΤΙΛΑΤΟΣ or ΟΥΤΙΛΑΤΟΣ; Pontifex Maximus, ΑΡΧΙΕΡΕΤΣ ΜΕΓΑΣ, or ΜΕΓΙΣΤΟΣ; ΔΗΜΑΡΧΙΚΗΣ ΕΞΟΥΣΙΑΣ, *Tribunicia Potestate*; ΕΥΤΥΧΗΣ, *Felix*; ΕΥΣΕΒΗΣ, *Pius*. Sometimes more flattering titles appear; as ΝΕΡΟΥΑΣ ΘΕΟΣ, Nerva the god; ΝΕΡΩΝ ΘΕΟΣ, Nero the god; ΘΕΑ ΝΕΩΤΕΡΑ, The new goddess, on coins of Faustina the Elder; ΝΕΟΙ ΗΛΙΟΙ, The new suns of Geta and Caracalla; ΙΟΥΛΙΑΝ ΑΦΡΟΔΙΤΗΝ, Julia the Venus, of Julia daughter of Augustus, reverse of ΑΙΒΙΑΝ ΗΠΑΝ, Livia the Juno. When the accusative case appears on coins, the sense is, that the people *honour* the person: thus *Mitylenii honorant JULIAM VENEREM*.

To express Latin sounds, the Greeks are often obliged to put their own enunciation of the same word, in characters very different from the Latin. Thus QUINTUS in Greek is ΚΟΥΙΝΤΟΣ; the Greeks having no Q, though they had at first, it being the *quoppa* on old coins, and in numerals; in which last it follows P and precedes R, as with the Romans. This letter they often put K, a sound indeed almost identic; and

even *quoppa* was forced to be called *koppa*, and retained as a numeral. The Greeks having also no V use **ΟΥ** in its place; though these letters rather express W, a sound indeed which, as appears from Quintilian, the Roman V often had. The Eolic digamma appears also to have sounded W, rather than V; but the later Greeks only used the aspirate for both H and W, calling the Veneti *Έπειροι*, &c.; so that in reading Homer, and other old poets, who wrote when W belonged to the Greek tongue, it is often uncertain when to sound the aspirate H, and when W. The Greeks also use B to express the Roman V. They always use K to express the Roman C, and Γ for G; as in Latin both these letters were always so pronounced; our soft C and G being merely modern corruptions, and even at present unknown in Germany and Scandinavia.

The legends on the reverses of Greek imperial coins are very various. KOINON, 'The community,' OMONOIA, 'The alliance,' are frequent on them; as cities, in the same province, formed leagues for mutual intercourse and support. The titles of ATTONOMOI, 'Living by their own laws,' and ΕΛΕΥΘΕΡΟΙ, 'Free,' are not uncommon. The former had Roman governors,

but were ruled by their own laws. The latter admitted no Roman governor, nor owned subjection even to the governor of the province, but were free states in alliance with Rome; though they owed this privilege to their timely and early acknowledgement of the Roman power. Other titles also appear, as **ΑΣΥΛΟΤ**, An asylum sacred and inviolable; **ΙΕΡΑΣ**, Sacred; **ΛΑΜΠΡΟΤΑΤΗΣ ΕΝΔΟΞΟΥ**, Splendid and illustrious; **ΜΑΤΡΟΣ ΑΠΟΙΚΩΝ ΠΟΛΙΩΝ**, Mother of colonial cities; **ΜΕΓΑΛΗΣ**, Great; **ΜΗΤΡΟΠΟΛΕΩΣ**, Metropolis; **ΝΑΥΑΡΧΙΔΟΣ**, Naval; **ΠΡΩΤΗΣ**, First. Names of magistrates also appear, as **ΤΑΜΙΟΥ**, Questor; **ΙΕΡΕΥΣ**, Priest; **ΑΡΧΙΙΕΡΕΥΣ**, High priest; **ΑΓΟΝΟΘΕΤΟΥ**, President of the games: with many others to be found in the explanation of the Greek abbreviations in the Appendix. Names of many games are also to be found, as the *Adriani* of Ephesus and Smyrna, *Aristi*, *Asclepii*, *Augustei*, *Actiaci*, *Cabirii*, *Corei*, *Demetrii*, *Panionii*, *Eugamii*, &c., in honour of kings and deities. These games were festivals and shows, at fixed periods of the year; and became important, and objects of ambition, when the Roman power prevented attention to real objects of ambition.

Inscriptions filling the whole field of the reverse are not so common in Greek coins. A few however there are, and particularly upon those of Smyrna. The imperial medals struck at Antioch are commonly very remarkable, from the letters S. C. inscribed on their reverses, within a particular crown, or wreath. Sometimes they have longer inscriptions; as in that most capital coin of Otho, of large brass, which is in Dr. Hunter's collection; upon which we read, within the usual wreath of Antiochian medals, ΕΠΙ ΜΟΥΚΙΑΝΟΥ ΑΝΤΙΟΧΕΩΝ, with the æra ET. ZIP. How the people of Antioch happened to adopt the S. C. signifying SENATVS CONSVLTO, 'By decree of the senate,' a mark almost peculiar to the Roman mint, in so many of their imperial coins, is attempted to be explained by M. de la Bastie in his notes on *La Science des Medailles*. He thinks it implies that the power of striking money was given to Antioch by special decree of the senate; while other cities had it by permission of the emperor. But it may seem that the money struck at Antioch, and which never bears the name of any magistrate, but only of the governor of Syria, was issued under the immediate direction of the senate, to pay the troops stationed in the east, the most remote part of the empire; and

to which the carriage of copper coin, in particular, would have been an expense almost equivalent to its value.

This leads me to observe, that the noted s. c. or mark of the authority of the senate of Rome for striking any coin, never appears upon those of gold or silver, in the sense we are to construe it, when it occurs upon the brass. Medallists lay it down as an infallible rule, that this mark upon gold and silver coins always refers to the subject of the reverse upon which it is stamped, and not to the coin itself. So far as we can learn, the Roman emperors had the sole disposal of the gold and silver coinage, but left that of brass entirely to the senate. Hence the s. c. is never wanting upon the brass; and in very few instances appears upon the superior medals; where it is always understood to refer to the device of the coin, as a statue, a triumphal arch, or the like, erected by decree of the senate; and not to the coin itself, as issued in virtue of that decree.

The simplicity of the legends to be found upon the early Greek coins has already fallen under observation! those of the Roman, with equal simplicity at first, by degrees proceeded to more explicit length, and, in time, from elegant and

simple veracity, degenerated into flattery. These remarks refer to the legends of the obverse; for those of the reverse began to flatter as soon as there was a prince, an idol upon whose altar to burn the cloudy perfume. We find Clemency and Moderation upon the medals of Tiberius, as well as equivalent virtues upon those of Titus. The *DIVI FILIVS*, the ‘Son of Augustus the Deity,’ upon the obverses of Tiberius, is a title more of security than flattery: but upon those of the following princes we find nothing more than their names, with the date of their tribunician power, or of their consulship, and the glorious title of *PATER PATRIAE*, The father of their country, till *PIVS* appears, followed under Commodus by that of *FELIX*, and at length by the tyrannic preface of *D. N. DOMINVS NOSTER*, Our Lord*. In the lower empire,

* Mr. Gibbon observes that Pliny, *Panegy.* c. 3. 55., &c, speaks of *dominus* with execration, as synonymous with tyrant. Yet, in *Epist.* lib. x., constantly gives that title to Trajan. A puzzling circumstance; and which can only be solved by saying that Pliny was forced to comply with the fashion. But it may also be said that Pliny in his *Panegyric* speaks merely as a subject; whereas in his *Letters* he speaks as the governor of a province, whose immediate lord the emperor was. A man employed by a king calls him his *master*; whereas, this term used by a common subject would be rather absurd, or imply all subjects slaves.

Stauracius first, and then Michael Ducas, and others, assumed the proud addition of ΒΑΣΙΛΕΥΣ, or King; which was followed by that of ΔΕΣΠΟΤΗΣ, or Despot.

The reverses of the very first imperial coins are not however wanting in adulation, nor is it to be wondered at, when we consider that Virgil and Horace, men of the most enlightened minds, whatever may be decided of their claim to genius, were yet capable of even forgetting the sacred dignity of poetry, and prostituting it at the bloody footstool of a tyrant. What Montesquieu says of the English, that, if ever they were reduced to be slaves, they would prove the meanest of all slaves, was exemplified in the conduct of the ancient Romans. This can no way be better proved than from the coin struck by decree of the senate, in which we find all the virtues ascribed to the most infamous set of monsters that ever disgraced humanity. It may however be said, in vindication of the Romans, that the ascribing of virtues to princes, from whose hearts they were most distant, was the only method which they dared to use to remind them of their duty to their subjects.

In a short time, however, a succession of vir-

tuous monarchs authorised the reverses so foreign to most of their predecessors. S. P. Q. R. OPTIMO PRINCIPI, so common on the coins of Trajan, is not flattery, but glory. All the virtues appear without impropriety on the medals of Nerva, Trajan, Hadrian, and the Antonini.

But, in proportion as the empire declined, the more common are flattery and gross impropriety in the legends of the Roman coin. So early as the time of Severus we find this upon one of Julia his wife, MATer AVGG. MATer SENATUs, MATer PATriæ.

A curious circumstance in the legends of a few Roman imperial coins, and which I have not seen well explained, is, that on some reverses we find a figure of Hope with SPES AVGVSTA, and the like. The meaning of *augusta* in such instances is obscure. Does it imply *sacred* in general, as was the primitive meaning of the word? Or *augustalis*, of the imperial house? Or that the empress is pictured under the image of Hope, &c., as Livia under those of Piety, and of Justice?

The Greeks, ingenious in faults as in virtues,

likewise carried their flattery of their Roman masters as far as it would well go. Certain it is that they surpassed the Romans themselves in this base art. We have a Greek medal of Commodus, with a legend implying that while that emperor reigned all the world was blest* ; a piece of adulation and falsehood only to be equalled by an inscription preserved in the garden of the Villa Borghese at Frascati, and formerly placed under a statue of Caracalla, in which, among other titles, is NVMINI PRAESENTI, ‘To the present Deity.’ Among other instances of the Grecian art in conciliating the favour of their masters, may be mentioned that of first winning the protection of the empress, and other imperial ladies, by striking beautiful medals in their honour; a flattery to which we are indebted for many a fine portrait not to be found in the Roman coinage.

It will be proper to add some particulars on the history of the Roman legends of coins. The large early copper coins only bear ROMA on the reverse. Afterwards we find the names and titles of the questor or director of the public

* Of Nicæa, ΚΟΜΟΔΟΥ ΒΑΣΙΛΕΟΝΤΟΣ Ο ΚΟΣΜΟΣ ΕΤΤΥΧΕΙ. ΝΙΚΑΙΕΩΝ. *Morel. Spec.*

treasury, the triumviri who managed the mint, the prætor, the curule edile, the edile of the people, the præfect of the city, the pontifex maximus, augur, *quindecimvir sacris faciundis*, *flamen martialis* and *quirinalis*, *septemvir epulonum*. And latterly, *triumvir reipublicae constituendae*; and *ad frumentum emundum*. The great magistrates out of Rome had also moneyers with them, in order, from bullion and the spoil of enemies, to coin money to pay the troops engaged in foreign service. Of them occur the names and titles of imperator, proconsul, proprætor, legatus, legatus *pro prætore*, quæstor, proquæstor, legatus *classis*, *triumvir coloniae deducendae*, or *reficiendis sacris ædibus*. All these titles appear on the reverses of what are called consular coins; while the obverse bears the head of a deity, generally without legend. In time the magistrates put the head of some illustrious ancestor on the coins, with his name; as Numa, Ancus Martius, Quirinus or Romulus, Brutus, Ahala; Caius Coelius Caldus, obverse of Caldus III. vir, and the like. This led the way to Cæsar, who first put his own head on his coins when made perpetual dictator; with the legend of names and titles on the obverse, and not on the reverse as before.

The legends of the Roman imperial coins are deservedly celebrated for their beautiful simplicity, and emphatic brevity, so as to be accounted models of the kind. *Signis Parthicis receptis, Judaea capta, Asia subacta, Rex Parthis datus, Menti Laudandae, Conservator urbis. Fundator pacis, Salus generis humani, Gaudium rei publicae, Regna adsignata, Felicitas publica*, with innumerable others, display more meaning in few and simple words, than most other languages can supply. The English, though remarkable for energy and brevity, would require different particles to make the sense of such short inscriptions complete.

But it is time that we should proceed to some few other particulars observable in the legends of ancient medals. Upon many of the coins struck in the Greek cities we find the legend of the obverse in Latin, while that of the reverse is in Greek. The reason of this, medallist writers have endeavoured to account for in many ways, but appear not to me to have lighted upon the truth, which seems to be, that the magistrate of such country mint, not having any portrait of the emperor, sent to Rome for one, which was returned in a dye ready cut with the legend. To this a reverse

was made by the Greek artists, the magistrate inclining to save the expense of cutting another obverse. In confirmation of this opinion, I believe it will be found that few or no coins occur with Latin legends on the reverse, and Greek in front. The dyes are also hastily done; and the manner of different mints.

Perhaps the most remarkable feature in the legends and inscriptions of Greek imperial medals is the addition, almost perpetual, of the title ΝΕΩΚΟΡΟΣ to the names of certain cities. The word is equivalent to the Latin *ædituus*, and will, in spite of my reader's smile, bear the English interpretation of church-warden*. It implies that the cities, who adopted that appellation, looked upon themselves as guardians of the shrine of some celebrated deity, whose devoted worshippers they were; and of consequence blest in the immediate and peculiar protection of such heavenly power. At other times it signifies solely the latter circumstance of particular favour; and in this sense we

* The word is derived by the etymologists from *νεως*, a temple, and *κορειν*, to sweep: the humble primitive meaning is therefore *temple-sweepers*. In Acts, xix. 35, we are told that Ephesus was the *Πολις νεωκορος*, or city devoted to the worship of Diana.

meet with ΝΕΩΚΟΡΩΝ ΤΟΥ ΣΕΒΑΣΤΟΥ, the νεωκοροι of the emperor, and the like; though in some instances this may be doubtless applied in the full sense of the word; for temples of different ΣΕΒΑΣΤΟΙ, or emperors, were frequent in the Greek cities, as marks of superlative flattery. Nor let us wonder that the most important Greek cities esteemed themselves honoured in a title which to us appears, at first glance, so trifling; for the celebrated temples, such as that of Diana at Ephesus, and others, were the grand sources of all the wealth and power of those cities who were their guardians. By them strangers were induced to crowd their streets, and lay out their money to enrich the inhabitants. Hence their wealth: and all possible power was derived from the vast influence which these holy cities had over others, in virtue of the sacred deposits committed to their care, and the imaginary, but no less strong, horror of the present deity. Both the authority and the opulence of these cities were increased by solemn and pompous games, celebrated at distant periods, in honour of their guardian divinity. At these games the emperors, sometimes present, and at other times by commission, caused such cities to be solemnly proclaimed ΝΕΩΚΟΡΟΙ, as a singular badge of

their favour: and hence in coins and inscriptions we often find B. ΝΕΩΚΟΡΩΝ, Γ. ΝΕΩΚΟΡΩΝ, ΔΙΣ ΝΕΩΚΟΡΩΝ, ΤΡΙΣ ΝΕΩΚΟΡΩΝ, implying that the inhabitants had been twice, or thrice, or oftener, honoured with this solemn distinction.

Albertus Rubenius has written a dissertation upon this subject; and he understands the numerals to imply that the cities had erected two, or more, temples to favourite deities, an opinion rather exceptionable. Illustrations upon this subject may also be found in that celebrated work, the *Memoirs of the Academy of Belles Lettres*.

A circumstance almost as remarkable of the Roman medals, is the inscription, VOT. V. MVLT. X., VOT. X. MVLTIS XX., to be found upon many reverses, and most commonly marked on a shield, or within a crown of laurel. This Du Cange interprets to refer to the artifice of Augustus, who pretended to lay down his power, and resume it for ten years longer as at the request of the senate. This term, says he, was by succeeding emperors shortened to five; and solemn vows were entered into by their subjects for their safety to the end of that period;

may, that double that period might be allotted to their reign, again to be prolonged, in the wishes of their people, to a future date. This inscription is also found upon coins of Crispus, and other Cæsars, or heirs of the empire; and it is hence apparent that the honour of such solemnities was also conferred on them, when created Cæsars. The *vota decennalia*, as on coins of Pertinax, and of Pupienus, were only vows to perform the decennalia, if the emperor should reign ten years; whereas *primi decennales*, or *secundi decennales*, imply these games to have been actually performed; and the emperor to have reigned ten or twenty years. On coins of Lucilla, Hadrian, Severus, Caracalia, and others, we find VOTA PVBLICA, with a sacrifice; showing that the vows were undertaken with that rite, as they were after performed with solemn games and rejoicings. Coins of Constantine II. and of Constans only bear SIC X. SIC XX. to express the wishes of the people, that, as the emperors had happily reigned ten years, so they might reign twenty. There were also *vota quinquennalia* for the emperor reigning five years; and games called quinquennalia performed when he had accomplished that period. From Aurelius Victor in his Life of Gordian III. it appears that Nero introduced this practice;

which is mentioned by Tacitus, and by Lampridius in his Life of Diadumenus. There were also *vota novi anni*, as appears from Spartian's Life of Hadrian, and from Dio, lib. 58: and there is a coin of Antoninus with S. P. Q. R. A. N. F. F. OPTIMO PRINCIPI, *Senatus populusque Romanus annum novum faustum felicem, &c.*; 'The senate and people of Rome wish a prosperous and happy new year to the best of princes.'

The compass of a coin is so small, that artists have always been obliged to use abbreviations in the legends and inscriptions. An explanation of the most common of these, originally drawn up by Patin, will be found in the Appendix, but with many additions. For any which do not there occur, the reader may have recourse to the large work of Ursatus, *De Notis Romanorum*. The Greeks do not deal so much in abbreviations; and when they use them, so much of the word is commonly given as to leave no doubt of the whole. A very little study of the Greek medals will enable any one to peruse their legends with facility, especially with the assistance of any work on Greek coins. An account of the Greek abbreviations is also given in the Appendix. It may however be observed,

that the interpretation of letters which do not often occur is a dangerous attempt, either with regard to the Roman or Greek coins. The risible blunders of Father Hardouin on the former are well known; and it was Fortunius Licetus, a man of learning, who discovered that L. IΔ., upon a coin of Hadrian, implying the fourteenth year of his reign, signified *Lucernas invenit Delta*; and who from thence ascribed the invention of lanthorns to Egypt.

SECTION XIII.

Medallions and Medalets.

BEFORE we proceed to the particular consideration of the coins of different nations, it will be proper to examine the Medallions. Under this term are included all the pieces produced by the ancient mints, which, from their superior size, were evidently not intended for circulation as coin, but for other occasions. Medallions were presented by the emperor to his friends, and by the mint-masters to the emperor, as specimens of fine workmanship. They were struck upon the commencement of the reign of a new emperor, and other solemn occasions; and frequently the Greek in particular, as monuments of gratitude or of flattery. Sometimes they were merely what we would call trial, or pattern-pieces, *testimonia probatae monetae*; and such abound after the reign of Maximian, with the *tres monetae* on the reverse.

It is to be observed, that all Roman pieces in gold, exceeding the denarius aureus; all in silver, superior in size to the denarius; and all in brass, superior to the *sestertius*, or what the medallists term large brass; fall under this description. Such, at least, is the common division: but, in my opinion, the gold medallions weighing two, three, or four aurei only, passed in currency as the Greek gold didrachms, tridrachms, or tetradrachms, according to their size. The like may be said of the silver, which are commonly of the value of a Greek tetradrachm: they, I have little doubt, went in currency for four denarii. This opinion may be confirmed by observing, that, in our own coinage, the five- and two-guinea pieces, and the crowns in silver, are as scarce in proportion as the Roman gold and silver medallions. Yet this idea admits of many exceptions; and is submitted to the reader.

But whether any of these pieces called medallions passed as coin with the ancients is a matter of no moment: it is sufficient to have pointed out what articles are now accounted of that class. The brass medallions, as the largest, so are commonly of the most exquisite workmanship, and uncommon device. Many of

them are composed of two sorts of metal, the centre being copper, with a ring of brass around it; or the contrary. The inscription of such sometimes bites upon both metals, and at other times runs upon one. Medallions of this kind are inimitable, and of undoubted antiquity.

Medallions, from the time of Julius, to that of Hadrian, are very uncommon, and of vast price: from Hadrian to the close of the western empire, they are, generally speaking, less rare.

The types of the Roman medallions are often repeated upon common coin. Hence they appear not of so much importance as the Greek, whereof the impressions are frequently most uncommon, and no where else to be found. A remarkable distinction between the Greek and Roman medallions lies in their different thickness, the Roman being often three or four lines thick, while the other seldom exceed one. When I speak of the Greek medallions, I mean those struck in the imperial periods; for few Greek medallions are found prior to the emperors of Rome.

But it will be proper to give the reader

some idea of the Greek and Roman medallions. Of Greek medallions, preceding the Roman empire, as has just been remarked, very few are known. Some occur of Rhodes; and there is a fine one struck at Syracuse, upon the defeat of Icetas by Timoleon. Icetas was prince of Leontium; and when Dionysius the Last yielded to Timoleon, and was sent to Corinth, Icetas with Carthaginian auxiliaries seized on Syracuse; but was defeated, and reduced to a private station by Timoleon. These events, which happened 340 years before Christ, are fully detailed by Plutarch, in his Life of Timoleon. The medallion is of silver, with the head of Ceres upon one side; and upon the other a female figure, perhaps representing Sicily or Syracuse, in a car, a Victory crowning her, and spoils in the exergue. Its workmanship is fine; but not equal to the gold coin of the same Icetas, struck at Syracuse, ΕΙΠΙΚΕΤΑ, ‘Under Icetas,’ which is a perfect gem, and surpasses all description.

Syracuse also affords a most remarkable medallion on another great occasion. The only one perhaps existing formerly belonged to Dr. Combe, and was engraved by his order, but not published. It is of the most exquisite Sicilian workmanship, and high relief, in perfect pre-

servation ; of copper, and about two inches in diameter. Upon one side is a female head, covered with a helmet, on which is a caduceus, and ROMA. Upon the other is a man's head, with a helmet wreathed with laurel, and M. M. Dr. Combe thinks this fine piece, which is now in Dr. Hunter's cabinet, was struck by Syracuse, in honour of Marcus Claudius Marcellus, who besieged and took that city, 210 years before Christ. Plutarch, in his Life of Marcellus, informs us that the Syracusans accused Marcellus before the senate, for pillaging their city, though they were friends of the Romans. He was acquitted ; and the Syracusans, who had been incited by his enemies, were not only pardoned by him ; but the senate, at his mediation, confirmed to them their liberty and laws. " For this reason," says Plutarch, " beside other signal honours with which they distinguished Marcellus, they made a law, that whenever he or any of his descendents entered Sicily, the Syracusans should wear garlands, and offer sacrifices to the gods." One of the signal honours mentioned by Plutarch seems to have been this medallion ; which is most remarkable for its being unique, for its beauty, for its preservation, and for the portrait of this great man.

These are perhaps the only Greek medal-

lions prior to the Roman empire; and they were, therefore, entitled to particular notice. Let us now give a few hints concerning the Roman; and afterward concerning the Greek, under the Roman emperors.

Many Roman medallions have S. C. as being struck by order of the senate; others have not, as being by order of the emperor. So far as I know, none have been found of the republic, nor of Julius Cæsar struck in his life-time. Of Augustus a noble gold medallion was found in Herculaneum, and Khell published a dissertation on it. There are medallions of Augustus, and of Tiberius, struck in Spain; and one of Livia at Patre in Achaia. Baldini in his account of medallions, to be found at the end of the Roman edition of Vaillant, gives one in brass of Antony and Cleopatra, reverse two figures in a car drawn by sea-horses. Of Tiberius there are many, and of Claudius. There are also found of Agrippina, Nero, Galba, Vespasian, Domitian. Those of Trajan, and Hadrian, have generally a very broad rim, beyond the legend, with indented circles: and of Hadrian, Baldini gives no less than forty-seven. A fine one, of Lucilla, on its reverse presents that empress, walking in a garden, and several Cupids overturning each other—a

meet emblem of her various amours; and which calls to mind Anacreon's description of his heart, as a nest in which old Loves begot young ones. There are fine medallions of Commodus, and his famous mistress Marcia: their heads are joined, and she wears a helmet. One of Pertinax bears, for reverse, that emperor sacrificing, with VOTIS DECENNALIBVS. There are many of Severus: and Gordian III. and Philip also afford a number. Afterward they become numerous of Gallus, Valerian, Gallienus, Aurelian, Probus, Diocletian, Maximian I., Constantius I., Constantinus I. and II., Constans and Constantius II. Of other emperors they are scarce. In Dr. Hunter's cabinet, among many others, is one of Otacilia. The king of France has a large gold medallion of Tetricus, published by M. de Boze, in the Memoirs of the Academy; but the engraver gives the letters as forked, which occasions suspicion of forgery. There is a curious medallion of Constans in brass, which represents him standing in a ship, and a human figure in the waves, with this legend, BONONIA OCEANEN. 'Bononia on the ocean.' This refers to his passage to Britain, in winter, A. D. 342-3, to repress the Caledonians or Picts, who were ravaging the province; and in which he set sail

from Bononia, now Boulogne. Du Cange has also published two curious medallions of Valentinian III.: one having on its reverse the triumph of Bonifacius, a great general: the other, Petronius Maximus in his consular chair, with PETRONIVS MAXIMVS V. C. CONS*.

The Greek medallions of Roman emperors are far more numerous than the Roman; that is, after Hadrian; for before that emperor Greek medallions are as scarce, or scarcer, than Roman. There are silver medallions of Augustus struck at Antioch. Of the same prince there are two brass medallions, struck by an African colony, in Dr. Hunter's collection; reverse a bacchant, with cup and thyrsus, and a panther at her feet, with Punic characters. The next Greek medallion I find is of Titus, reverse Vespasian; but no town is named on it. With Hadrian Greek medallions begin to be quite numerous of Ephesus, Laodicea, Smyrna. Those of Antinous, his catamite, are also found of Adriana in Bithynia, Chalcedon, Smyrna, and other places. Antoninus Pius has of Ephesus, Cyzicus, Myrina, Smyrna, Cæsarea. Marcus of Ephesus, Cæsarea, Smyrna, Apol-

* De inf. ævi numismatibus Dissertatio, ad fin. Gloss. Lat.

lonia, Magnesia, Nicæa, Pergamus, Sardis, Nicomedia. Faustina the Elder of Cyzicus. Verus of Ephesus, Pergamus, Prusa. Commodus of Attalea, Thyatira, Ilium reverse Hector in a car, Cyzicus, Smyrna, Ephesus, Mytilene, Samos. Pescennius Niger of Antioch. Severus of Ephesus, Ilium, Perinthus, Smyrna, Tarsus. Julia Domna of Thyatira, Cæsarea, Pergamus, Mytilene. Caracalla of Abydus, Byzantium, Ephesus, and many other places. One of Laodicca has a council of about thirty figures. Under Macrinus are Greek medallions of Ephesus, Cæsarea, Cyzicus: Elagabalus of Ephesus, Philippopolis: Alexander Severus, of Perinthus, Pergamus; one of Perinthus has for reverse the Zodiac and twelve signs. Maximin has medallions of Magnesia, and Samos. Balbinus of Tarsus; as has also Pupienus. Gordian III. and Philip have several; as also the other princes down to Gallienus, with whom the Greek medallions cease. Only the chief towns are above mentioned; but a few others struck medallions under many of those emperors. Though the Greek medallions be seldom fine, yet they are highly valued for erudition, variety, and curiosity. Those of Antioch, Tyre, Sidon, and of Egypt, in base silver, are so numerous that they are justly suspected to be local coins;

and are generally excluded from the title of medallions.

All medallions, save in one or two instances, are very rare, and of princely purchase; for which reason I shall not enlarge any more upon them, but content myself with observing, that, even in the richest cabinets, twenty or thirty medallions are esteemed of great weight. In the last century, however, Christina, queen of Sweden, was so fortunate as to procure about three hundred; and the king of France's cabinet, the most opulent and wonderful collection of medals ever seen, has by degrees attained to about twelve hundred medallions—a number in former times not believed to exist. Dr. Hunter's cabinet contains about four hundred, exclusive of Egyptian.

There are also small Latin medallions, of a size between first and second brass, or larger than our half-crown, easily distinguishable from their thickness, and uncommon neatness, and manner. These are, by Italian medallists, called *medaglioncini*, or little medallions; and they are scarcer than medallions. In Dr. Hunter's collection is a fine one of Alexander Severus and Julia Mamæa, face to face; reverse three

figures, with FELICITAS TEMPORVM. As these pieces are so very uncommon, it is unnecessary to say more of them, in a work meant for the public at large.

Another very curious, though not uncommon, class of Roman pieces not intended for currency, consists of small coins, or *missilia*, scattered among the people on solemn occasions; those struck for the slaves in the Saturnalia; private counters for gaming; tickets for baths and feasts; tokens in copper and lead; and the like. These curious remains have almost escaped the notice of medallists; and have not yet been arranged in one class, or named. A special work on them would be highly acceptable: but I must content myself with giving a few hints. I shall beg leave to give this class the appellation of MEDALETS, as the genius of our language admits of this diminutive, in *ringlet*, *bracelet*, and the like*: and the Italian will afford *medagletta*, as *libretto*, *loggetta*, &c.; the French, *medaillette*, as *fillette*, &c. &c.

Baudelot in his curious and entertaining

* Other old English diminutives are *kin*, as the Italian *chino*; and *y* or *ie*; but this last is rather Scottish.

work, *L'Utilité des Voyages*, has produced many singular specimens of medalets; but without arranging them in one class, or any special design of illustrating them. Such is one ascribed to Claudius, reverse the *digamma* of that prince, J , which he wished to introduce into the Latin alphabet, with its old Greek and proper sound of our W. From the top of the digamma a palm-branch springs, with this inscription; IO SATURNALIA IO. A Gothic coin, produced by Baudelot, has on one side a head; reverse this inscription, SIGNVM, being probably a military token. Another Saturnalian piece has a bird on both sides, but in different postures, with this legend, SATVRNALIA Magna. One medalet bears upon one side two gladiators; and upon the other a man encountering a lion, without any legend or inscription. Another has Serapis, with $\Phi\Upsilon\Lambda\Lambda\Xi\text{E}$ inscribed on the reverse; that is, 'Protector for the fifth time.' The figure of Fortune appears on another, with this legend, SENTIVM, while the reverse has this inscription, FELICITER. Silvanus appears also, with his crook in one hand, and a hare's head in the other, SILVANI; reverse an altar, HERMEROTIS, apparently the name of a slave of Claudius, as Baudelot produces this inscription:—

MEDALLIONS AND MEDALETS.

HERMEROS
TI. CLAVDII CESARIS AVG.
GERMANICI SER.
THEAMIDIANVS AB MARMORIBVS
MAGISTER
FERONLE ARAS QVINQVE
D. S. D D.

One of the most common pieces of this class has, on the obverse, the head of an old woman veiled with a laurel-crown: reverse only S. C. within a wreath; and the reader will find it engraved in Plate II. of this volume. Bandelot thinks the head is of Acca Laurentia, nurse of Romulus; to whom a festival was ordained during the Saturnalia. Perhaps it was struck in ridicule of Julius Cæsar; for the manner of the laurel-crown, and its high appearance over the head, perfectly resemble that of Julius on his coins. Others have a ship upon one side; reverse T, or a cross, which was the mark of Priapus; and occasioned many false invectives against the first Christians, who paid such respect to the cross. One has a soldier marching upon one side; reverse a banner, without legend or inscription; and probably a military token. The Salian cap appears on another; reverse a cadu-

ceus, with S. C. Seguinus in his collection gives a most curious medalet, which is engraven also in Plate II. of this work. It bears the head of a lady, with C. S.; reverse four bones, anciently played with, as our dice, with this inscription, QVI LVDIT ARRAM DET QVOD SATIS SIT; ‘Let them who play give a pledge, which will be sufficient.’ M. Petit is uncommonly happy in his explanation of this piece, from an epigram of Virgil to be found in the *Analecta*.

Copa Syrisca caput Graia redimita mitella,
 Crispum sub crotalo docta movere latus,
 Ebria famosa saltat lasciva taberna,
 Ad cubitum raucos excutiens calamos.

* * * *

Pone merum, et talos: pereat qui crastina curat!
 Mors autem vellens, ‘Vivite,’ ait, ‘venio.’

There is great reason to believe that this medalet preserves a bust of this famous courtesan, with her initials C. S. Copa Syrisca; and that it bears the very *tali*, or bones to play with, mentioned by Virgil, on the reverse. The *Thesaurus Morellianus* has also curious pieces of this kind; as one in silver, with a head of Saturn, SAT. reverse a crescent, star, comet, and serpent. One in lead, the head of Minerva, reverse a ship.

Another in lead of Nero, reverse Mars, with PAVLLIN. A third in lead, C. PEDANI. with a boy and serpent on reverse. The last pieces I shall mention of this kind, are those with the heads of emperors upon one side, reverse only numerals, III. IV. V. VIII. &c. and the noted *spintriat*i of Tiberius. Both of these kinds appear tickets for the baths, as the number seems to denote the particular bath. Some have the head of a girl, with a vessel used at the baths in her hand. The *spintriat*i are so immodest, that few will bear mention. But some are merely ludicrous; as one which has an ass, with a bell about his neck, and a soldier riding him: another with two figures hoisting a woman into a basket in the air. Of the others that will just bear mention, is a man with titles around him, as chief of the games; and a woman in ridicule of the modest bath-girl above mentioned. There is also one marked XIX, on which appears an emperor triumphing in a car: this car is placed on the back of a camel; and behind the emperor is a monkey mimicking him.

SECTION XIV.

Medals called Contorniati.

THIS class ought likewise to be discussed before proceeding to the common coins of antiquity. They are so called from the Italian CONTORNIATO, *encircled*, because of the hollow circle which commonly runs around them; are not distinguished from medallions by the size, but by their thinness; faint relief; reverses sometimes in *intaglio*, hollowed, not raised; and, in general, by their peculiar and inferior workmanship.

Many and various have been the opinions of medallic writers respecting these singular pieces of coinage. Some suppose them struck by Gallienus, to the memory of illustrious men, and celebrated *athletae*, at the time when he caused all the consecration coins of his predecessors to be restored. This sentiment seems nearly adopted by M. Mahudel, who says, the *contorniati* were struck originally at Rome, about the close of

the 3rd century*. Others ascribe their invention to Greece, and that in her days of glory; because they bear frequently the names and images of illustrious Greeks, as Homer, Pythagoras, Socrates; and of Grecian *athletæ*, or actors in the games.

Havercamp, who has published an express work upon these pieces, thinks they were struck from the time of Constantine I. to that of Valentinian III., on account of the public games.

Other opinions have been given, which to enumerate were superfluous. I shall therefore content myself with submitting an opinion to the reader, which I have as yet found in no author, together with a few arguments to enforce it.

Upon the very first sight I had of *contorniati* coins, it struck me that they could be nothing else than tickets for different places in the public games. The dye, appearance, device, inscription of the reverse, every thing confirmed this opinion, which I have since had

* Hist. de l'Acad. des Belles Lettres, Tome V. p. 284.

the pleasure to find perfectly consonant to that of two or three of the first medallists in this country.

This opinion so far agrees with that of Havercamp, and other writers, as it supposes these pieces struck upon occasion of the games. But it differs from them, in putting these medals as mere tickets for places at the games; and still more in supposing them struck in all ages of the empire, from Augustus downward. For their rudeness has induced medallists to consider them as of a low period. They have not reflected that the occasion, and use, of these pieces forbade any attention to the workmanship. The fine artists of the mint had other employment, than to make tickets; and such hands were employed as could be had. Those who suppose them struck in the lower empire, are reduced to the deplorable dilemma of imagining, that Christian princes thought Nero's head an honour to their games; and preserved the portrait of Apollonius Tyanæus the enemy of their faith; and those of other pagan philosophers. Jobert indeed gives them to the upper empire: but expresses not his opinion whether they were struck under one prince, or all who gave games. But I am convinced that they were

struck under the various emperors, whose names they bear; and that when Constantine I. introduced Christianity, they would almost vanish, instead of beginning as Havercamp says. The difference of workmanship in these pieces, if accurately inspected, may show this of itself, independently of other reasons.

These pieces, though of different kinds, are mostly of a size between two and three inches diameter. Some have, upon the obverse part, the head of the emperor, or empress, who gave the games; and almost a series might be formed of them, from Augustus down to Gallienus. What strengthens my opinion very much is, that such emperors as were remarkable for their attachment to public diversions occur very frequently on these pieces, which we shall in future call *ticket-medals*, if the reader will; whereas the others appear more seldom, and those who never presented any games, not at all. Nero, for instance, is so common on their obverses, that his ticket-medals sell for almost no price at all.

Other obverses are most precious from preserving to us the portraits of illustrious authors of antiquity, no where else to be found. Sal-

lust, Horace, and other Roman writers, were delineated on these tickets, when the memory of their persons was yet fresh to the inhabitants of Rome, and their portraits may therefore be depended on. So much cannot be said for the Greek portraits, in this way, of Homer, Solon, Pythagoras, Socrates, and others, all which I take to have been struck at Rome, when Grecian actors were to perform, or in the Grecian cities during the Roman empire. However, even these are valuable, as being ancient, and perhaps traditional, portraits of those great men.

A few obverses again present *athletae*, or actors in the games, and such are commonly represented holding a horse by the rein, or in some other attitude peculiar to their profession.

But the reverses present the most certain arguments for the opinion above advanced with regard to the use of these pieces; for on them there is almost always a charioteer driving a chariot, or some similar device, peculiar to public games, and to them alone. Those struck for the theatre are the most scarce, and have sometimes an actor at full length on the reverse,

with PLACEAS, ‘Mayest thou please!’ or some such legend. One, in particular, has a bust of Sallust on the obverse; and on the other side three persons, one of whom has an instrument resembling the common flute; another, an instrument like the scenic flute seen in the hands of Pan; while the third is declaiming. The legend is PETRONI PLACEAS, ‘Mayest thou please, Petronius!’ The person represented declaiming is evidently this Petronius, who was perhaps that day to make his first appearance upon the Roman stage; and the whole design, of this last instance in particular, is so clear, that it moves surprise how the intention of these tickets could so long have escaped the medallic authors*.

It has been said above, that these pieces were tickets for different seats or places at the games. What leads to this supposition is the variety of marks to be found on the obverses

* Tickets of this kind are used for the pit, to this day, at our theatres. The practice is at least as ancient as Charles II., for a very fine one of that prince, with his bust, without titles in front, and FOR THE PIT on the reverse, may be seen in the British Museum; as well as another of William and Mary of the same model.

of them. Some have a sprig of laurel; others a P, with an E below it, which last is very common*; others, a particular animal, or some such badge. All these marks, in such tickets as are perfectly preserved, are cut in the brass, and then filled up with silver. There is in the British Museum a fine collection, containing upward of one hundred of these pieces, presented to that noble institution by the earl of Exeter; upon one of which the head of an empress, Faustina, I think, is singularly adorned with a line of silver bordering her head-dress, and another around her neck. The particular marks, I have no doubt, referred to the different honourable seats to which the tickets conducted.

The pieces of this class, with imperial portraits, are of very little value: those bearing the images of illustrious men are estimable, though not of much expense. Apollonius Tyanæus, who flourished in the reign of Domitian, and Apuleius who lived in that of Antoninus the philosopher, are, it is believed, the latest of that description who appear upon these ticket-medals.

* May not this imply *Podium Equestre*, or the box of the Equestrian order.

SECTION XV.

Greek Medals.

HAVING in two former Sections considered the Greek and Roman coins as Money, we shall now beg leave to consider them merely as Medals in a cabinet. The Greek coins, if not the most ancient which we have, are at least of superior antiquity to any whose dates can be clearly authenticated. Perhaps some of the Barbaric pieces, of eastern countries, may have a claim to priority of æra; but as that claim is latent, and must ever be so, owing to such coins having no legends, or legends in characters irretrievably lost, we must allot to the Grecian medals that place in a cabinet, from their antiquity, which their workmanship might insure to them, independent of that adventitious consideration.

The invention of coinage, like that of other fine arts, is very obscure. We know that the

Egyptians, who claim the origin of many of the arts, have no title to this; for no Egyptian coins with hieroglyphics are found; nor any that are charged with the deities of Nile, till the introduction of the Greek language into that country under the Ptolemies.

Herodotus, in his first book, informs us, that the people of Lydia, a country in Asia Minor, were supposed to have been the first who coined money. This is thought to have been before the time of Homer, upward of one thousand years before the Christian æra.

Whether this art was really invented by the Lydians, and by them first substituted to the ancient eastern mode of weighing the metal, or whether they received it from their more eastern neighbours, and were considered by the Greeks as the original inventors, because they handed the art to Greece, cannot be decided. Lydia was, for many centuries after the period to which this invention is ascribed, a powerful and opulent kingdom, till Cræsus the last king, so celebrated for his wealth, was conquered by Cyrus king of Persia; so that it is not at all improbable that to so rich and flourishing a state the very origin of coinage may be due.

From l'Abbé Barthelemy's *Essai d'une Palacographie Numismatique**, the following stages of the progress of coinage may be arranged.

1. Coins without any impression.

2. Those with a hollow indented mark, or marks, on one side; and impression in relief only on the other. Such are found of Chalcædon on the Hellespont, Lesbos, Abdera in Thrace, and Acanthus in Macedon; together with those *ascribed* to Egium in Achaia; as the Abbé rightly phrases it, for they seem to belong to another place, as has been shown. Abbé Barthelemy does not mark the years; but if conjecture be allowable, this class seems to extend from about the year 900 before our æra to about 700.

3. Such as have an indented square divided into segments, with a small figure in one of the segments; the rest vacant: and impressions on the obverse, as usual. Some of this class are found of Syracuse, and other places; and evi-

* To be found in les Mem. de l'Acad. des Inscr. Tome XXIV. My excellent friend M. Gossellin at Paris has a fine collection.

dently afford the next step to a complete reverse, or that of impression on both sides in relief. These may extend to the year 600 before Christ.

4. Those of Caulonia, Crotona, Metapontum, and other places, which are struck hollow on the reverse, while the obverse is in relief commonly with the same figure; though this may reasonably be ascribed to a local coinage in Magna Græcia; yet, from other marks, these coins may be looked upon as of equal age with those in the last class*.

5. Coins in which a square dye is used either on one or both sides. Such are of Athens, Cyrene, Argos, and other cities; and of Alexander I. and Archelaus I., kings of Macedon. Some of the latter occur with this mark, and others without; which shows that it was disused in his reign; and fixes its discontinuance about the year 420 before our æra.

6. Complete coins both in point of obverse and reverse. Some of which occur in Sicily,

* Abbé Barthelemy places this class after the next; but many reasons induce me to differ from him.

where this art was carried to a perfection unknown to any other country, so early as Gelo, who began his reign in the year 491 before Christ.

A celebrated author observes that coins of most remote antiquity may be distinguished by these infallible marks: 1. Their oval circumference, and globous swelling shape. 2. Antiquity of alphabet. 3. The characters being retrograde; or the first division of the legend in the common style, while the next is retrograde. 4. The indented square, described in a former Section, on the reverse. 5. The simple structure of the mintage. 6. Some of the very old coins are hollowed on the reverse, with the image impressed on the front. 7. The dress, symbols, &c., are often of the rudest design and execution*.

It is well known that not a few ancient medals of different states occur with all, or many, of these marks of profound antiquity. Those of Posidonia, Crotona, Sybaris, and two or three other cities; some Persian pieces, with the archer upon one side, and the hollow square upon the

* Frælich, *Notitia Elementaris Numismatum*.

other; several coins of the first kings of Macedon; are examples. There is in the British Museum a medal of silver, ascribed to Lesbos, of this description; upon which much has been said and written. The art must have circulated widely before the square on the reverse was obliterated by superior art in the fabric; for I have seen a silver drachma of Cyrene, with the *syphium* upon one side, and head of Jupiter Ammon upon the other, evidently of Grecian workmanship; upon both sides of which the square was very visible.

But in a short time the Greek coins assumed great elegance. Innumerable of the medals of cities, which, from the character, we must judge of highest antiquity, have a surprising strength, beauty, and relief, in their impressions. Many of those of the early Macedonian, and other monarchs, are entitled to no less praise: but, about the time of Alexander the Great, the art seems to have attained its very highest perfection.

Of the Greek medals, those of cities are the most ancient; that is, we have several evidently struck before those of the Macedonian princes—the most early series of monarchic

coins. The civic medals are generally stamped on the obverse, with the head of the genius of the city, or some favourite deity; while the reverse often presents some symbol used by the city, at the time the piece was struck. The legend contains the initials, monogram, or whole characters of the name of the city. Some of the Sicilian coins have a Greek legend on one side, and a Punic on the other, owing to such cities deriving their origin from Carthage, or Phœnicia; or the coins being struck by the Carthaginians in Sicily.

Some connoisseurs prefer the regal coins of Greece; others the civic. The former interest by their portraits; the latter by their variety. The former are more important perhaps to ancient history; the latter to ancient geography. To him who is fond of ancient geography, the civic coins are singularly interesting. It is also pleasing to see ancient accounts of cities, of their customs, religion, and the like, confirmed by the coins. The civic coins likewise afford a kind of political barometer of the wealth and power of each city and country. The numerous and beautiful gold coins of Cyrene, a country, from its remote situation, little known in history, afford

sufficient proofs of its great power and wealth. This Grecian colony in Africa proceeded from Thera, the southernmost isle in the Ægean sea, and which had been peopled from Sparta. It settled in Cyrene during the heroic ages of Greece; and, though bordering on Egypt, never was subject to the Egyptian kings; but paid tribute to Cambyses the Persian, when he conquered Egypt. When Egypt became Grecian, under the Ptoiemics, Cyrene also yielded to these monarchs.

There is great room to believe, that coinage was invented in Lydia, though other eastern nations had, before this, used unstamped pieces of metal. And the small civic coins of gold, electrum, and silver, struck in Asia Minor, are perhaps some of the earliest; though, if we judge from workmanship, these coins are so exquisite, that the coins of Greece, from their rudeness, seem to claim priority of æra. In short, all other countries are out of the question; but whether Greece or Lydia first invented coinage seems dubious. There is every reason to think that the Ionians, Æolians, and Dorians had brought most arts to great perfection, before such exertions were known to the parent country. Greece was naturally poor, till enriched by

commerce; whereas the Asiatic shores were fertile and luxuriant to excess. Sciences flourish in poverty; but the arts require wealth. It is also observable that Homer, Anacreon, Alcæus, and most other of the early Greek writers, were all of the Asiatic coast and isles. The coins themselves also confirm this opinion; for those of Asia Minor in the earliest stage of coinage, with the indented marks on the reverse, present us obverses so exquisitely finished, as to set all ancient and modern art at defiance. This phænomenon foils all theory; and must induce the belief that the arts had in Asia Minor arrived at the greatest perfection, before they passed into Greece. The Lydians were of the same origin with the Greeks, both being of Thrace; and it is credible that, with equal ingenuity, and a soil far more propitious, the Lydians were the real parents of many Grecian arts; and the monuments of the Etruscans, a Lydian colony, almost vye with the Greek. Some of these Asiatic coins also appear in a further progress of the art. One has the head of a flying squirrel upon one side, in relief; and that of a cock on the other, in hollow, most admirably finished. Another has a lion's head in relief; and the head of a battering-ram in hollow.

Civic coins, with the rude indentation, also appear of Mallus in Cilicia, with an archer like the Persian darics. Of Argos, with a wolf's head; of Bisaltia in Macedon; Camarina in Sicily; Celenderis in Cilicia; Cranos in Cephallenia; the island Melos; Neapolis in Macedon; Phaselis in Lycia; not to repeat those of Aegina.

To dwell upon the various types, replete with elegance or curiosity, to be found on the Grecian civic coins, would be infinite; and to describe only a few, unnecessary. Let us therefore next say a few words on the Greek coins of kings.

The Greek monarchic coins are often of the same construction with the civic; only that they bear the name of the prince on the reverse. Of some kings, many such occur with the bust of some deity in front, for one which presents the image of the prince.

The most ancient series is that of Macedon, commencing with Alexander I., who began his reign 501 years before our æra. Medallists have now given up those ascribed to Amyntas

tas I.; for they bear no mark of such antiquity; and Frœlich thinks them of Amyntas king of Galatia. With Philip, the Macedonian coins begin to be beautiful. Those of Alexander the Great are wonderful. The head of Minerva on his gold affords a variety of exquisite faces; and the coins of him and his father exceed all ever executed, except those of Sicily, Græcia Magna, and the ancient ones of Asia Minor.

It is something surprising, with regard to the coins of Alexander the Great, that his own portrait so seldom occurs on them. His gold coins always have a head of Minerva; reverse a Victory standing. His silver a head of young Hercules: reverse Jupiter sitting. His brass has various types, but no portrait. The only coin yet found of Alexander, with his head, and struck during his reign, is a silver hemidrachm in Dr. Hunter's cabinet, which is unique, and is engraven in our first plate. This coin represents him as very young, and appears to have been struck when he first came to the throne, and before he gave any order for discontinuing his father's practice of giving his own head on his coins. The man on horseback, upon the reverse, is common on Mace-

donian coins; and this was surely struck in Macedon. But there are many coins struck after the death of Alexander, which bear his portrait. Morell has published two coins of Commodus in small brass, which have the head of Alexander on the reverse. They are of Nicæa in Bithynia; and one reads ΝΙΚΑΙΕΩΝ, the other ΑΛΕΞΑΝΔΡΟΝ ΝΙΚΑΙΕΙΣ*. Homer also appears on reverses of this town. But the most common coins, with the portrait of Alexander, are those struck by Macedon under the Romans; several of which are engraven in Dr. Hunter's coins of cities, and one of them given in our first plate. On these he is always represented staring upward, with eagerness, as wishing for more worlds to conquer. Some con-torniate pieces also give us this portrait. Lampridius, in his life of Alexander Severus, tells us, that he caused many coins to be struck in gold and electrum, with the head of Alexander the Great; but none have reached us. Plutarch says that Alexander had a fair complexion;

* See that elegant little work, the *Specimen Rei Nummariae*. There are also coins of Apollonia in Caria, with the head of Alexander. Clemens Alex. Protrept. p. 47, says Alexander was sometimes represented with the horn, as son of Ammon; but he never appears so on his coins, for Goltzius and Haym are no authorities.

and his features are pleasing, though remarkable for high cheek-bones, as are many Greek and Roman portraits. Augustus used a seal with the head of Alexander, as we learn from Suetonius. It is hoped the reader will pardon these remarks, as Le Brun, and many others, have fallen into such errors in delineating Alexander. The reverses of his coins have, beside the Victory on gold, and Jupiter on silver, sundry small symbols as mint-marks, denoting the places where they were coined. These, if we trust a celebrated medallic writer*, must be thus interpreted. The sphinx is the sign of Chios: the griffin, of Teos, and Abdera: the lion's head in profile, of Cyzicus, or Cnidus: the horse's head, of Aegea in Cilicia: the bee, of Ephesus: the rose, of Rhodes: the anchor, of Ancyra: the double axe, of Tenedos: the torch, of Amphipolis. An ancient author† informs us, that some coins, and those of Alexander in particular, used to be worn as amulets; and many medals occur in cabinets, bored, as would seem, with this intention,

* Medallic works of Pellerin, published at Paris, 1762. *et seq.* 10 vols. 4to. Tome I. p. 14.

† Trebell. Pollio xxx Tyr. Hist. Aug. Sc.

The other coins of Macedonian kings need not be insisted on; and the reader will find in the Appendix a list of those of other kingdoms, to which he is referred. Sicilian coins are famous for workmanship, even from Gelo's time. The coins of the Syrian kings, successors of Alexander, almost equal his in beauty. Those of Antiochus VI. are peculiarly exquisite, both for the beauty of the coin and of the king; perhaps the most perfect example of male beauty to be found. The Egyptian Ptolemies have fine relief, but do not equal the Syrian in delicacy and finish. The family coin of Ptolemy Philadelphus, with his father and mother on one side, and himself and queen on the other, is extremely fine and interesting. There is a coin of Alexander, son of Neoptolemus, king of Epirus, with a head of Jupiter Dodonæus, crowned with oak, of miraculous workmanship, and thought to be done in Magna Græcia, when he came to assist the Tarentines. This has been engraven by Bartolozzi. Even the earlier Parthian coins of the Arsacidæ are worthy the Grecian workmen, whose they are, as is evident from the Greek legends imprest on them, in many of which these monarchs assume the title of ΦΙΛΕΛΛΗΝΟΣ, or LOVER OF THE GREEKS.

How the Grecian language and character come to appear upon Parthian medals, cannot be explained, but from the excellence, and consequent universality, of that speech at the time. Indeed it is no wonder, that a language, in which genius had first spoken, should have attracted the admiration of all nations. The Grecian tongue acquired that pre-eminence from its writers, which the Latin gained afterward from the force of the Roman arms alone; for no writer in that language displayed that miraculous originality of genius which shines in the Grecian productions. The best Roman writers thought themselves fortunate if they could steal from the Greeks with some dexterity; and their Virgil, whom they fondly classed as their first poet, obtained that title because he was the chief of the robbers, and had not a single thing in his possession which was not stolen. It is amusing to observe upon medals the progress of the Greek tongue: the very improvement of the character, and other trifles, delight the legitimate admirer of the divine writers of that great country: him I mean who reads them in the original language, where only they are to be known in all their beauty and majesty. From the introduction of some characters, the antiquity also of Greek

coins may be ascertained; the H and Ω, for instance, not being known in Greece till the archonship of Euclid, which falls into the 2d year of the 94th olympiad; 401 years before the Christian epoch.

Hitherto we have spoken only of such Greek coins as are more properly such, being struck before the Roman empire swallowed up the Greek cities and sovereignties. It is to these that the high praise bestowed* upon the Greek mint, must be chiefly confined; for the Grecian imperial medals are not equal to the former, though they do not always yield to the Roman.

In the series of Grecian imperial coins we meet with very uncommon portraits and reverses. Their flattery or attention to the fair sex induced them to coin a number of pieces containing portraits of the empresses and other females in particular, no where else to be found. The people of Mitylene, the chief city of Lesbos, one of

* Les medailles Grecques, generalement parlant, ont un dessein, une attitude, une force, et une delicatesse à exprimer jusqu'aux muscles et aux veines, qui, soutenues par un tres grand relief, leur donnent une juste preference en beauté sur les Romains.

the *isles that crown the Aegean deep*, and the birth-place of Sappho, peculiarly distinguish themselves in this way.

Those Greek coins of cities which have the head of an emperor, or empress, are called imperial Greek coins. But those which have no such impressions are classed with Grecian civic coins, though struck under the Roman power.

Of imperial Greek coins none occur in gold. But there are silver of Antioch, Tyre, Sidon, Tarsus, Beritus, Cæsarea, and one or two other cities in that opulent and trading quarter; not to mention the silver of Egypt, which, like the others, is very base. The silver coins of the cities above mentioned have, after the time of Augustus, generally an eagle on the reverse, with $\Delta\text{HMAPX. EΞΟΥΣΙΑΣ}$, *Tribunitia potestate*, or ‘With Tribunician power.’ Sometimes, indeed, they bear S. C. Those of Antioch present, now and then, the genius of the city sitting, with the river Orontes swimming beneath her feet, as on coins of Syrian monarchs. Syrian silver coins sometimes bear the club of Hercules, the founder, or the

famous Tyrian shell-fish, whence the Tyrian purple, our crimson, was derived. Sidon gives the car of Astarte, or a head of the goddess: Tarsus has sometimes only a monogram, expressing the name of the city. Cæsarea in Capadocia abounds in silver of various sizes, and of a better kind than the Syrian. Silver coins of Lycia also appear of good work, and good metal: the reverse two harps and an owl sitting on them. Silver coins of Gelon, in Sarmatia, much resemble the Syrian; and have the ΔΗΜΑΡΧ. ΕΞΟΤΣΙΑΣ, with an eagle holding a stag's foot. The latter symbol belongs to the city: the eagle, as on the other coins above mentioned, is that of Rome. One of this city has ΓΕΛΩΝΟC CAPMATI. This town of Gelon has almost escaped the notice of geographers; but appears to have been on the north of the Euxine sea, where some Sarmatic or Slavonic tribes were mingled with the Scythians, or Parental Goths*. Commerce with Tyre and Sidon may have induced a similarity of coinage.

* Steph. Byzant. alone mentions this town; for it can hardly be the Gelonum of Herodotus, in modern Poland. The ruins of a Greek town in Poland would be a curious discovery: but I wonder that no writer has examined this.

The Greek imperial brass coins are so abundant, that it is unnecessary to specify a few. Those of Antioch, generally with a Latin legend on obverse, and Greek on reverse, are so numerous as to furnish a series of almost all the emperors; being apparently struck, as before-mentioned, to pay the forces in the east. Vaillant says, that when Syria was conquered by Pompey, it received this power of striking money, *senatus consulto* *. Those of Ceretapa in Phrygia are remarkable for good workmanship; as are those of Bithynia, and Phrygia. On those of Tarsus are curious views of objects, almost in perspective; and there is a singular coin of Gangra in Paphlagonia, with a view of two castles and houses between them. It is now in Dr. Hunter's collection, to which it passed from that of Dr. Combe, who caused it to be engraved. Dr. Mackenzie brought it from the east.

The coins of Egypt under the Roman em-

* The coins with the eagle Vaillant ascribes to Antioch in Pisidia. Those of Antioch in Syria have Latin legends on the obverse till Trajan; Greek after. Ammianus Marcellinus, lib. xxii. speaks of Dracontius the *Monetae Praepositus*, at Antioch.

perors, being marked with Greek legends, range with the Greek imperial medals. They are remarkable for thickness, and baseness of metal. The silver series is at first about the size of our shilling, but three times as thick: after the time of Commodus, it declines by degrees, both in size and baseness, till it is not much larger than a six-pence, and the metal is only bad brass washed with silver. This decline and scarcity of silver through the whole Roman empire, was certainly owing in a high degree to the trade with the East Indies, which received silver, but returned none. Egypt, the grand centre of this trade, must have of necessity been first and most affected by it. At present the East Indies, that grand sepulchre of European wealth in ancient times, are in the hands of Britain, and afford to us a prodigious fund of cash; as we squeeze the sponge of ancient European currency. But China will never be in the possession of any European power; and it is curious to see the luxury of tea, a very late invention, restore money to its ancient progress. Nor were the East Indies in our power, till a new luxury had prepared the way for sending European cash still further east. The Greek and Roman coinage was in the East Indies melted down into bullion, and ornamental plate; or recoinced in the rude mint-

age of the country; so that there is no room to wonder that so little of it is found there in its proper shape.

The silver coins of Egypt are not so well executed from Augustus to Nero, as afterward. From Nero to Commodus, they are often admirable; and of a style of workmanship, which can neither be called Greek nor Roman. There is in them a tone of roundness, strength, and relief, which is inexpressible. Compared with the Greek or Roman, they want delicacy and minute finish; but often unite elegance to boldness. The strokes are full, and large; and appear masterly even from a seeming contempt of finish. The reverses are extremely various and singular; and full of the capricious religion and manners of the people.

From Commodus the Egyptian silver gradually declines, as above mentioned, till the reign of Constantius I., when it ends. The series consists of a thousand coins, or more. They often differ from the Greek in giving the name of the deity around his figure or bust; as $\Delta\text{ΙΟΣ}$ ΟΛΥΜΠΙΟΥ , for Jupiter; $\Delta\text{ΙΟΣ}$ ΠΟΣΙΔΩΝΙΟΣ , Neptune; $\Delta\text{ΙΟΣ}$ ΑΠΟΛΛΩΝ , Apollo; and the like. On the earlier ones a dragon is frequent,

with NEO ΑΓΑΘ. ΔΑΙΜ. ‘To the new good ‘dæmon.’ Some have ΑΕΝΔ. ΕΚΑΤΟΥ. an epithet of Apollo, ‘Εκατος, or *joculator*,’ as supposed. The famous Pharos and a ship appear on reverses of Commodus, and others. Some bear only a ship finely executed. Many scarce portraits of emperors, and of empresses, decorate the series. But the Hostilia Severa, which Walker gives as Egyptian, was doubtless only an Otacilia Severa.

The Egyptian brass coins of the Roman period also claim notice. Till Vespasian there are only two sizes, equal to the second and third Roman brass. Vespasian, who was much attached to Egypt, as we may judge from the account which Tacitus gives of the miracles he wrought there, seems to have indulged the Egyptians with the privilege of issuing large brass, as used in Rome itself. All the Egyptian Othos, the most common coins of that prince in brass, are of the second size; and bear for reverse an head of Isis, or of Serapis, with L. A. or ‘Year First.’ Some have names of towns; and there is in Dr. Hunter’s cabinet a fine one struck at Cebennutus in first brass, of Domitian, who appears decorated with a wheaten crown, as Gallienus does in Roman gold. On the

brass coins of Egypt a female figure, with part of a ship in her hand, and the Pharos behind, is very common, probably expressive of Alexandria. A harlequin-like figure, with a net over him, appears on reverses of Hadrian. One of Antoninus Pius, in third brass, gives us Isis sitting on the flower of the lotus. With this emperor very fine work begins in the Egyptian brass; as on that of the first size, with the judgement of Paris, and many others. The twelve coins of this prince, with the twelve signs, are very curious*: as is his ΕΥΘΗΝΙΑ, 'Abundance;' and those of the Nile with Ι5, '16,' or the highest fruitful rise of that river. The last brass coins of Egypt are of Marcia Otacilia Severa, wife of Philip the Elder, A. D. 244, though silver are found till Constantius I., so bad as now to appear brass. But the genuine brass coins of Egypt are thinner than the silver; and of a distinct fabric. Under Valerian I. and Gallienus, A. D. 254, the new coinage of *denarii aerei* was struck in all the great towns of the empire, with Roman legends and mint marks; and among the latter AL. ALE. or Alexandria in Egypt, is frequent.

* Published by Barthelemy, Mem. de l'Acad. xli.

I shall close this Section with observing, that for the student of Greek coins, by far the most important part of the medallie science, the book of Frœlich, entitled *Notitia Elementaris Numismatum*, is solely calculated, and he will find it of singular service. In particular, there are useful tables of the names of Grecian magistrates, and of the æras of cities, with a list of the cities whose coins we have. The catalogue of the symbols of cities is however almost useless, so many cities having the same badge, or continually changing their badges; not to add, that the colonies of every city commonly adopted the sign used by the parent seat at the period of their aggression. All these reasons make this branch uncertain. But happily it is a narrow one, most of the civic coins bearing the name of their place of mintage; and the very ancient ones, which do not, can only be identified by accurately comparing their impression and fabric with the more modern.

SECTION XVI.

Roman Medals.

IT is a little surprising, that though the Grecian coinage was carried to high perfection before the foundation of Rome, yet nearly two centuries more should elapse before any mint was known to the Romans. For, according to the best authorities*, it was in the reign of Servius Tullus that the first Roman coins appeared, which were large pieces of brass, rudely impressed, on one side only, with the figure of an ox, a ram, or some other animal, whence money, it is said, drew its Latin term of *pecunia*. These symbols, the ox in particular, were derived from the coins of the Tyrrheni or Etruscans, a people of Italy, originally Lydians, according to Herodotus†, which are distinguished by such tokens. So that it would appear that not only Greece, but Italy, was

* Plin. Hist. Nat. lib. xxxiii. c. iii.

† Lib. i.

indebted to the Lydians for the tradition, if not the invention, of coinage.

In the progress of time, the impression of the *as* was changed to that of a bust of Janus upon the front, and the prow of a ship on the reverse; and for the more general utility, pieces of inferior weight and value were coined. They bore a relative and ascertained value to the parent coin: the *semis* being half the *as*; the *triens*, a third part; the *quadrans*, a fourth part; the *sextans*, a sixth; the *uncia*, a twelfth. While the *as* continued a pound weight, these parts consequently contained proportional ounces, the Roman pound always consisting of twelve, and the ounce of seven denarii, as the Grecian of eight drachms. But the Romans were after obliged to lower the size of their coin so much, that the *as* fell down to the weight of half an ounce, and its divisions in proportion.

Having, on a former occasion*, treated so fully on the origin and progress of Roman coinage, it is needless to give more than these bare preliminaries here. Let us therefore proceed to consider the Roman coins merely as medals

* Sect. VII.

in a cabinet; and in this view they fall into two grand Divisions, namely of Consular coins, and of Imperial.

DIVISION I. ROMAN CONSULAR COINS.

Though these coins seldom, or never till toward the close, bear the names or titles of consuls, yet they are not improperly called consular, because struck in the consular times of Rome. They are also called coins of families; and are always arranged alphabetically in families, according to the names which appear on them. The reader needs scarcely to be told that in Roman names, as *Caius Caelius Caldus*, the first, or *praenomen*, Caius, marks the person; the second or *nomen*, Caelius, tells the family. These two alone are used with us: but the Romans added the *cognomen*, as Caldus, further to distinguish the person from many of the same family, with the same *praenomen*. The *agnomen* was a mere epithet, as Africanus.

The BRASS consular coins are rather uninteresting; consisting chiefly of large unwieldy pieces, with types of insipid similarity. Very few have any imagery or symbol, even toward

the end, when the silver became various and curious. The large ancient pieces are generally kept in boxes apart, by those who are versed in them. Till 250 years before Christ, the *as* exceeded two ounces in weight. Forty years after it fell to one ounce; and about 175 years before Christ, it was half an ounce; as Pliny states the declension. Even when the *as* is half an ounce, it and its parts retain the same uniform distinctions, as when it was twelve ounces. The *as*, the head of Janus: *semis*, of Jupiter, and *s*: *triens* of Minerva, with *oooo*: *quadrans* of Hercules, *ooo*: *sextans* of Mercury, *oo*: *uncia* of Rome, *o*. The prow of a ship is the perpetual insipid reverse of ALL these pieces, with very few exceptions. Sometimes a shell, a wheel, two heads of barley, a frog, an anchor, contribute their charms to enliven the reverses; but such coins seldom, if ever, bear ROMA; and it is doubtful if they are not of cities in Etruria, which bear these types, while Rome abides perpetually by the prow of a ship. Indeed, till the end of the first Punic war, 240 years before Christ, Rome was so far from aspiring to empire over Europe, that her existence as a small state in Italy was precarious. Considering her known poverty, it is no wonder that very few of her coins appear, till the period

that the as was reduced to half an ounce, just about the time that she began to display her power in Gaul, Illyricum, and Macedon. In the times of Marius and Sylla, or a century before Christ, some little variety begins to appear in the Roman coinage; and I cannot help suspecting that the supposed as of two ounces with a Victory on the reverse, CN. BLASIO. N. F. is really a late sestertius of Cæsar's time, though it bears the head of Janus. For, about that period, both obverses and reverses began to be altered, and mingled. Morel produces what he calls an *as* of two ounces, T. AFRA.; and then what he calls a *sextans* of the same weight, legend, and work. They seem both sestertii. Even the half ounce *as* is very scarce; and most of the consular brass coins are of the third or smallest sizes. The uncia indeed of the ounce *as* appears with a dog for reverse, and ROMA; which shows that some variety was even then admitted.

Having treated, in such limits as our work will allow, of the earliest, being the brass, coinage of Rome, let us proceed to the next in point of antiquity, namely that of silver.

Pliny tells us it was about the 485th year of

Rome, that is, about 300 years after the first brass coinage, and 266 years before the Christian period, that the first SILVER issued from the Roman mint. The DENARIUS was the first and the last principal form which it assumed, for the other sizes are so very scarce that it is clear few were ever struck. This was at first stamped with a head of Rome in front, and X, or a star, to mark that it was worth ten ases; and upon the reverse bore Castor and Pollux on horseback, or a chariot of victory. Afterward the busts of different deities were given on the obverse; and, in process of time, about the 7th century of Rome, those of illustrious men, such as Ancus Martius, Numa, and others, whose deaths had long secured their virtues from envy. But, till the age of Julius, a century after, no portrait of a living personage appears upon any Roman medal; Cæsar was indeed the very first who assumed that high honour*. A good judge† observes, that there is very small difference in the workmanship of the best and worst silver consular coins, upon which illustrious names occur: this leads him

* Dio, lib. XLIV.

† De la Bastie, in his notes to the last edition of *La Science des Medailles*, 1739.

to think, that the plan of engraving on coins the names of great men and magistrates, was only introduced about the time of Marius and Sylla.

The reverses of a few silver consular medals are fraught with much erudition and curiosity. We frequently find remarkable actions, and other matters, represented on them in no mean taste. Thus on a coin of the family of Æmilia, with this legend, M. LEPIDVS PONT. MAX. TVTOR REGIS, Lepidus appears in the dress of a consul, and puts the crown upon the head of young Ptolemy, whom his father had left to the tutorage of the Roman people. On the obverse is the turreted head of the city Alexandria in Egypt, with ALEXANDREA. So, in the same family, there is a medal, with a youth on horseback, carrying a trophy, with this legend, M. LEPIDVS ANNORVM XV. PRAETEXTATVS HOSTEM OCCIDIT CIVEM SERVAVIT.

Other instances of curious consular medals in silver are, that in the family Æmilia, in which L. Æmilius Paulus appears dedicating a trophy for his victory over Perseus, who, with his two children, stands by, their hands tied behind their backs. The equestrian statue of Lepidus, who conquered the Ligurians, is in

the same family; as is also the *Basilica* of Lepidus; and *Puteal Scribonii*. The dream of Sylla narrated by Plutarch also appears: he sleeps, and Diana brings him Victory. Portraits of Bacchius, Jugurtha, the last Philip of Macedon, the first and second Brutus, Metellus, Marcellus, Regulus, Sylla, Pompey, Calpurnius, and others appear on consular coins. In the family Antistia is the Actiacus Apollo; and the FOEDVS CVM GABINIS, two men with a sow between them. In Antonia occurs the Temple of the Sun. Rome and Italy are personified; Victory crowns Rome, with other specimens of that fine personification afterwards displayed on the imperial coins. In the family Claudia, Marcellus dedicates his trophy of Viridomarus, king of the Gauls, in the temple of Jupiter Fere-trius. The family Considia gives the temple of Venus Erycina, with her head on the obverse. Dilia, the Villa Publica in the Campus Martius. Other families present the old Rostra, PALICANVS; Aqua Martia; statue of Mars Ultor; temple of Jupiter Capitolinus; Tarpeia killed with shields; temple of the Sortes Prænestinæ; the Muses; rape of the Sabines; triumphal arches; statues; and other objects. But most of these elegant ornaments, like those of the brass, are very late; and do not commence till about

a century before Christ, when the managers of the mint took this opportunity to celebrate the actions of their own families. The consular silver bearing merely a head of Rome for obverse, with a chariot of Victory on reverse, amounts to nine twelfths. One of the remaining twelfths has only Castor and Pollux on reverse. The other two twelfths have various figures. The QUINARII have always the head of Jupiter, reverse a Victory; and Morel has published thirteen old ones, when the denarius was in its first stage of about 90 grains, as denarii! Let me just add, in corroboration of the opinion expressed in Section VII., that the large denarii with ROMA are the most ancient, that some such bear the old Pelasgic A, not the later Roman. The few silver SESTERTII have a head of Mercury, reverse a caduceus.

GOLD was first coined at Rome, 62 years after the application of the mint to silver. The AUREVS is the general gold coin. The consular coins, whose number is estimated at 200 in brass, and 2000 in silver, extend not to above 100 in gold, whereof most are curious. For instance, the beautiful Pompey with his sons on the reverse, and the Brutus with his brother Lucius, commonly classed with im-

perial coins, though the spirit of these personages should rank them with the consular. A gold labienus, in lord Oxford's collection, as appears from the Catalogue, deserves mention only as forged. The family Domitia gives us in gold the temple of Neptune, in good perspective. The EID. MART. of Brutus occurs in gold, with L. PLÆT. CEST. Two or three gold SEMISSES of families also occur. Most of the gold consular coins are of great beauty, and high value.

DIVISION II. ROMAN IMPERIAL COINS.

Though the Greek authors, ancient monuments, and coins, infinitely exceed the Roman in every perfection, insomuch that the Romans appear but mere apes of the Greeks; yet those of Rome interest us more, because her empire spread over most of Europe, while the Grecian was chiefly restricted to Asia. The Roman empire, carrying the light of science and civilisation along with it, into the extremities of Europe, interests every European, from the universal desire of knowing the ancient state of his country, and of his ancestors, conquered or discovered by the Romans. Nor could a

more fortunate event have taken place for the history of Europe, as well as the advantage of its inhabitants, than this greatness of the Roman empire, the parent of European science and civilisation. Hence, among other monuments of Roman art, the imperial coins particularly engage our attention, as once the circulation even of Britain, ‘divided from the world,’ as Roman bards say, and frequently dug up at this day from her soil. The Roman coins may be called those of the emperors of Europe; and interest us like those of our own country. Cæsar, who begins the imperial series, was conqueror of Gaul; Claudius of Britain. The imperial series alone therefore is what concerns us, as our own ancient currency; not to mention the personifications of our country, and historic notes concerning it, to be found in that series only.

To begin with the BRASS, as the more ancient Roman coinage, it has already been observed that, in the time of Marius and Sylla, about fifty years before that of Cæsar, some elegance and variety commences in the Roman coinage. In the times of Julius Cæsar this elegance is carried to great height. In the

family Marcia there is a beautiful as, with the heads of Numa and Ancus; reverse Victory in a porch, and the prow at her feet. It is only in the half ounce as that variety can be found: any larger pieces are dupondii or sestertii. Sylla indeed, as we learn from Cicero, and gold coins remaining, introduced great confusion into the coinage; and perhaps the brass had its share, by alteration of sizes and types. Thus the as, just mentioned, bears a Victory the peculiar symbol of the quinarius.

The imperial brass is of three sizes, large, middle, and small. The *large* brass forms a series of surprising beauty, and vast expense. In this series the various colours of the patina have the finest effect; and the great size of the portraits, and figures, conspires to render it the most important of all the Roman coinage. As it exceeds even the gold in value, few of my readers may be supposed capable of such expense; and it is therefore unnecessary to dwell on particulars concerning this series.

The next series, or *middle* brass, exceeds the former in number; but presents not such elegance of work, or of types. Many coins are

common in second brass, which are rare in first: but very few examples of the contrary occur. Hence this series yields much to the former in price, as in dignity. Many rare and curious coins however occur in this series. To instance one or two from Dr. Hunter's cabinet: there is a Tiberius, with this inscription on the reverse, TRIB. POT. XXXVIII. A Gallienus, obverse his head, with a laurel crown, and a turret on his forehead, GENIVS P. R. reverse this inscription, ANT. URB. S. C. but this last is rather a *medaglionchino*. Coins of Faustina the Elder are peculiarly common in this size; but those without DIVA are very scarce, and always bear ANTONINI PII AVG. This circumstance would show that most of these coins were struck by her good husband, after her death. The provinces of Hadrian are common in second brass, though scarce in first. Those of Antoninus Pius are rare in both sizes.

In first and second brass there are many coins which particularly interest us Britons, by relating to the history of this island. Such are the triumphal arch of Claudius, first real Roman conqueror of the South of Britain, inscribed DE BRITANN. also occurring in gold

and silver; the ADVENTVI AVG. BRITANNIÆ, and EXERC. BRITANNICVS of Hadrian*; the coins of Antoninus Pius, Commodus, Severus, with a Victory, VICTORIA BRITAN. but especially those personifying the country BRITANNIA. It is surprising that none of our antiquaries has written a special work on this subject, which is capable of much and curious illustration. The number of Roman coins relating to Britain is remarkable; more than twenty having been struck at various times, while those personifying Italy, Gaul, Spain, and other regions of the empire, exceed not four or six at most for each country. Only one country vyes with Britain; and that is Dacia on the extreme north-east of the empire, as Britain on the extreme north-west. No doubt this circumstance of remoteness in these two countries recommended them to this particular attention, as more expressive of the extent of Roman power†.

* Vaillant gives us also EXERCITVS YSC. in second brass of Postumus; and adds, *Ysca urbs Angliæ, in regione Silulorum, in qua secunda legio Augusti hyemabat, quæ fidem Postumo præstitit.* Upon what authority?

† For a curious gem with Britannia, found in Flodden field, see Horsley's Brit. Rom.

As those Roman Britannias more particularly interest Britains, a plate of the most memorable is given at the end of this volume. Ten are there produced, and not above four others exist; and those vary little or nothing from some engraven in that plate. The other coins with triumphal arches, and victories over the Britons, are not given, as they have nothing expressive of this country, except the legend.

The set begins with that admirable coin of Claudius, from the cabinet of Christina, queen of Sweden, published by Havercamp; and which is the rarest and most beautiful of the Britannias. The same occurs also in gold; but without the bason in the left hand, which appears to contain pearls, for which Britain was anciently so renowned, that Cæsar was reproached, as Suetonius tells, for having attacked it from avarice of them. The coins of Claudius and Hadrian refer to the conquest of the south of Britain: but those of Antoninus Pius relate to that of the north by his general Lollius Urbicus, who conquered all up to the *Castra Alata*, or Inverness. In the time of Commodus, the Caledonians rose in arms, about the year 183, to assist the *Meatæ*, or

Britons, between the walls of Hadrian and Antoninus, in throwing off the Roman yoke*. Marcellus the general of Commodus subdued the Mæataë, and made peace with the Caledonians†. The several Britannias of Commodus therefore relate to his reduction of the Mæataë; and the consequent security of South Britain. Those of Severus concern his famous expedition to the north of Caledonia; the noted hills of which country are alluded to by the mount on which one of his Britannias sits, as given in our plate.

The *small* brass series abounds with curious coins. Till the times of Valerian and Gallienus, they are generally scarce; but afterward extremely common. In the former period portraits of the emperors are rare in small brass; but in the latter many are found which occur in no other series, as most of the usurpers, Zenobia, Vaballathus, and many others.

* Dio, lib. 72.

† This intelligence is drawn from the Excerpta of Theodosius (Dion. Leunclavii, p. 851.), which mention that before the war of Severus and Clodius Albinus, A. D. 198, the Caledonians did not keep their promise, but prepared to defend the Mæataë.

Hence it is best to form a series of silver, along with that in small brass; both being the cheapest of the Roman coins, and within the reach of a moderate income, or of a purse labouring under that complaint which physicians term *ολιγοχρυσια*. As this series has been too much neglected by medallist writers, and presents us with innumerable coins, to be found in no other series, I shall beg leave to give a few hints concerning it.

In this series it is a common fault to arrange many coins, which have been plated with gold or silver, the forgeries of ancient times, but which time has worn off either wholly or in part. All real brass coins have the S. C. till the time of Gallienus; as the senate alone had the power of striking brass, while the emperor himself had that of gold and silver. When the S. C. therefore is wanting, the coin was certainly once plated; as in general the different type and fabric, being those of gold or silver, sufficiently show of themselves.

With Pertinax, A. D. 192, there is a temporary cessation of the small brass; nor after him do any princes occur in that series, till Valerian, A. D. 254, excepting Trajanus Decius,

A. D. 250, only. After Valerian the series is continuous, and common. Thus of Julian I., Albinus, Severus, Caracalla, Geta, Macrinus, Diadumenian, Elagabalus, Alexander, Maximin I., the Gordiani, Balbinus, Pupienus, Philip, Gallus, Volusian, Emilian, there are no small brass coins struck at Rome. Those imputed to these princes have been plated, and belong not to this series. The brass coinage gradually declined in size, from the time of Severus, so that parts of the as could not be struck; or at least it was held unnecessary to strike them. Trajanus Decius in vain attempted to restore the coinage; and Valerian and Gallienus were forced to issue *denarii aerei* of billon, and small assaria, as shown in Section VII. But most, if not all, the above princes, not occurring in Roman small brass, are found in the colonial and Antiochian small brass, with Latin legends; not to mention the Greek; though this series is, by the most rigid medallists, allowed to admit the Greek and colonial, as immediately belonging to it.

The serieses of large and of middle brass are of two fixed and known sizes; the former about that of our crown, the latter of the half-crown, though after Severus they gradually lessen. But

the small brass takes in all the parts of the as, and every brass coin not larger than our shilling in size belongs to this series; a privilege adding greatly to its number, variety, and curiosity. The *minimi* indeed, or very smallest, it is proper to keep apart, as after mentioned.

Let us, after these general remarks, produce a few particulars of this series, in order to redeem it from the neglect which its proud brethren, the first and second brass, have procured it. The coins of Julius Cæsar in this size are of peculiarly fine workmanship. They bear his portrait, reverse of Augustus; or the reverse has a crocodile, *ÆGYPTO CAPTA*; the latter, being very rare and fine, is engraven in Plate II. of this volume. Of Mark Antony, there are several; and some with Cleopatra. Augustus occurs, reverse an eagle, or a temple, *ROM. ET AVG.* Mr. Walpole has a fine one, reverse Venus drawn by sea-horses; put with the family *Fulvia*, from the name of the mint-master on it. More common pieces are those with only numerals on the obverse, I. II. &c. up to XIII. probably tickets for the baths, as the *spintriat*i of Tiberius, and belonging to the class of medalets. Tiberius appears with the same reverse as Augustus, a temple, *ROM. ET*

AVG. Caligula has Tiberius, or Germanicus, for reverse: some of his have no portrait, but only a cap of liberty and S. C. The noted temple, to Rome and Augustus, also forms one among the reverses of Claudius. Nero is particularly rich in small brass coins, of five different sizes, all bearing his portrait. One of exquisite beauty, has for reverse a table, ornamented with griffins, and other devices: upon it is placed a wreath of laurel, and a beautiful vase, of which the embossed human figures are so minute, and finished so surprisingly, as to stamp these coins among the most exquisite productions of the ancient mint. Baron Stosch's famous gems, with vases, do not exceed these coins, of which the legend is CERTAM. QVINQ. ROM. CO. S. C. Another of Nero has Rome sitting on armour. Another an owl on an altar, reverse a palm-branch; a most minute coin highly finished. Another bears Apollo, or a Muse. A very rare small brass coin in M. D'Ennery's cabinet has Poppæa in a temple, DIVA POPPAEA AVG.; reverse Claudia her daughter by Nero, also in a temple, DIVA CLAUD. NER. F.

After Nero no small brass coins occur which can be certainly allotted, till Vespasian with portrait; reverse a caduceus. Others of same

reverse have a globe and helm on obverse. Others bear shields and spears, reverse a trophy; or a palm-tree, reverse pontifical instruments, there being eight types of this emperor. Titus appears, reverse a caduceus; and another with Julia his daughter sitting, IVLIA AVGVSTA. Of Domitian there are as many as of Nero. One has his head, reverse a caduceus; another a cornucopia. One the head of Mercury, reverse a caduceus: another, double this size, Mars, reverse a coat of mail. Others bear the head of Rome, reverse the *figus ruminalis*. There are three sizes with the head of Minerva, reverse an owl. One obverse gives a griffin holding a wheel, reverse a tripod and kettle. A very small coin has the hat of Mercury, reverse a caduceus. Domitia, wife of Domitian, vyes with her husband, in the number and curiosity of her small brass coins. Some bear her head, reverse a hamper of corn; some ears of wheat and heads of poppies; some a parrot sitting on a palm-branch; some a ship; some a tripod and serpent; some corn and poppies; some a fine vase.

Those of Nerva have a hamper of corn, reverse a caduceus. Trajan occurs in two sizes, with S. C. in centre of the reverse DACICO, PARTHICO, &c. running around. Some of his

have a table and wreath, like the fine ones of Nero; some an eagle, reverse a thunderbolt. Of Hadrian the best has a ship, FELICITATI AVGVSTI. Others the table, vase, and wreath; a harp; Sabina his empress. Pius has for reverses an eagle; an eagle, owl, and peacock; a club and a caduceus crossed. Marcus, the head of Jupiter Ammon. Verus, a captive bound. Pertinax, the emperor sacrificing at an altar.

After this there are no real small brass coins, except of Trajanus Decius, reverse Mars standing, s. c. and perhaps of Emilian, till they become common under Valerian. But from Valerian to Tacitus, the *denarii aerei*, or copper washed with silver, are generally blended with the real assaria, or small brass coins. The latter are in fact scarce from Valerian and Gallienus to Tacitus, as will be found on attentive examination; almost all these small pieces retaining a little of the gilding of the *denarii ærei*.

But there are innumerable coins in small brass, after Gallienus, of great variety and value. Such are Macrianus, Lælianus, and other usurpers, and Aurelian's coins, *Metalli Ulpiani Pannonici, Norici, and Delmatici*. In Dr. Hun-

ter's cabinet, is one of an unknown Nigrianus, a radiated old man's head, quite different from Nigrinianus, DIVO NIGRIANO; reverse, an eagle on an altar, CONSECRATIO; in the field OF. II. exergue, KAVO. It would appear from this KA. that the coin was struck at Carthage; and it seems likely that Nigrianus was an usurper in Africa, and Nigrinianus his son. Our Carausius presents many curious and rare coins in small brass; as the head of Victory, ADIVTRIX AVG. like the Fortune, supposed Oriuna. The badges of his legions are also rare and curious. Those coins with AVGGG. are historical, as they show that Diocletian and Maximian allowed his title. Eugenius and Magnus Maximus are not unfrequent in silver; but Hannibalianus, Delmatus, and many others, scarcely occur but in small brass. One of Maria, wife of Honorius, hitherto not known to exist in coins, is engraven from the author's little collection in Plate II. It has the same reverse with the Helena Juliani, a female figure holding the *hasta pura*, or pointless spear in one hand, and a palm-branch in the other, PAX PVBLICA. The coins of Julian II. in small brass, DEO SANCTO SERAPIDI, &c. are curious; as is the noted APOLLINI SANCTO, certainly belonging to his reign. Many reverses are extremely scarce, though the emper-

ror's other coins be quite common. Thus of Probus, *Eternitas Aug. Felicia Tempora, Origini Aug. Restitutor Orbis, Siscia Probi Aug.* bring high prices; though the rest of that emperor's small brass be common to excess. Of Constantine I. *Adventus Aug. Claritas Reip. Gloria Perpet. Liberator Orbis, Plura Natalia fel. Utilitas Publica*, with a few others, are in the same predicament. Mr. Douce's collection, among others unpublished, has a lco, reverse a lion and star.

I have insisted more on this series, because too much neglected by medallist writers; and because it is more open than most of the others to common purchase. But it is time to pass to the silver, after mentioning that the series in small brass extends from the beginning to the close of the Roman empire; nay, far into the Byzantine; closing with Constantine Pogonatus, A. D. 670.

The SILVER imperial coins are so numerous and various; that it is almost unnecessary to mention any in particular. This series is as complete as any, and of far cheaper purchase, very few emperors being scarce in silver. The small brass forms a fine supplement to it, and

becomes common when the silver becomes scarce, so that a numerous suite may be formed in one or other metal. Most types even of the large brass and gold are found in the silver, which thus unites the advantages of all metals. Sometimes the silver and gold coins, as being of one size, are struck from the same dye, as the young Nero, reverse a votive shield, EQVEST. ORDO PRINC. IVVENT. and others. One of the rarest silver coins is that of Gneius Pompey, son of the great Pompey, in Dr. Hunter's collection. It is supposed to have been struck in Spain before the battle of Munda, soon after which he was slain. At Talavera in New Castile, is this inscription; GN. POMPEIO MAGNI POMP. F.* Morel, *tab. I. IV.* has published the same coin in all respects, except that for F. he reads P. by mistake, and so gives it to Pompey the father, whom this son much resembles. If we except Pertinax, Didius Julianus, Pescennius Niger, the Gordiani Africani, and the emperors from Claudius Gothicus to Constantine I., all other Roman silver is common, but extremely interesting from its great variety, curiosity, and beauty.

* Carter's Journey from Gibraltar to Malaga, 1777.

The imperial GOLD form a series of wonderful beauty and perfection; but being only attainable by men of princely fortunes, it need not be insisted on in this work. It shall only be observed, that the workmanship is carried to the greatest height; and the richness of the metal surpassed by that of the types. As gold refuses rust, the coins are generally in the same state as they came from the mint.

Before closing this brief account of Roman medals, the COLONIAL ought to be mentioned. Roman colonies being settled in various parts of the empire, their coins sometimes have Greek, sometimes even Punic legends; though generally that on one side of such is Latin. But those with Latin legends only, are far more numerous. Vaillant has given us an able and curious work on the coins struck by Roman colonies, to which those wishing for full information on the subject are referred. Some of these coins are elegant, though most are rude and uninteresting. There is one of Pella in Macedon, of Alexander Severus, which bears for reverse a fine personification: Constancy being figured as a young man sitting on a rock, holding a palm in his left hand, and a finger of his right to his mouth. The colonial coins only

occur in brass; no colony except Nemausus having a right of striking even silver. Those in first brass are very rare, till the time of Severus. They begin with Julius and Antony. Spain, a country of amazing fertility and beauty, had more Roman colonies than all other countries put together: but the Spanish colonial coins cease with Caligula, who took away this privilege from Spain. The colonial coins of Corinth are the most various and beautiful, presenting triumphal arches, temples, gates, statues, baths, and figures of gods and goddesses, as Venus in a car drawn by tritons, Neptune and Ino, Venus armed giving a shield to Cupid, Pirene the nymph sitting on a rock with an urn, and the like, executed with all the beauty of Greek workmanship.

Other remarkable colonial coins are of Emerita, with the gate of the city; of Illice, the temple of Juno; of Tarraco, the temple of Augustus, and the altar and palm of the same; a fine temple of Abdera, reverse of Tiberius. The coins of Cassandria in Macedon are generally small brass, with the head of Jupiter Ammon on the reverse, and furnish that series with many fine heads of emperors, with Latin legends, from Claudius to Severus, but always

with the same reverse. Many scarce portraits are found on colonial coins of that size; as the two Agriopinas, Agrippa Cæsar, Drusus Cæsar, Octavia Neronis, Cæsonia, Messalina, and others. The colony Babba presents us with a bridge; Berytus, the temple of Astarte, and of Neptune, Neptune and Beroe, temple of Bacchus; Cæsarea in Palestine, the river Adonis and Genius of the town; Patræ, the temple of Mercury; Emisa, a most beautiful temple with statues; Heliopolis, or Balbec, the temple of Jupiter; Ptolemais, that of Fortune, and that of Diana; Sidon, many curious types corresponding with her ancient glory, as the goddess Astarte, and others; nor does Tyre yield to her. Coins of Tyre bear Dido standing, while a figure near is digging the foundations of a town, a gate of which appears at a distance, with this legend, ΔΕΙΔΩΝ: others present her giving a plan of Carthage to her followers. Deulton gives the graces; Diom, the temple of Cupid; Troas, that of Apollo; Rhessaina, the temple of Jupiter, and that of Minerva; Neapolis of Samaria, Mount Garizim, and the temple on it; Hippo in Africa, a fine triumphal arch, reverse of Gallienus. Those types are sometimes repeated on reverses of different coins, from Julius till the colonial

coins end with Gallienus and Salonina. But the reader must bear in mind that colonial coins with such types are rare, and of high value; and that, till the time of Trajan, *three quarters* of them bear only a plough, ensigns, or some such simple badge of a colony; though after Trajan's time they are generally various and curious, and do not deserve the neglect some have shown. It must strike the reader that many of the above must be useful to travellers, who wish to compare ruined edifices with their ancient appearance. It is also remarkable, that while Spain had perhaps fifty colonies, Camalodunum is the only one in Britain of which there are coins. There is one of Claudius, reverse a team of oxen, COL. CAMALODON. AVG.*

This brief account of Roman coins shall be closed with that curious class, which French medallic writers call *quinarii*. But as Vailant, and all others, allow all languages to be mingled in small brass, so in this all metals are allowed to be mixed, else nothing like a series could be procured: and the smallest imperial silver alone are *quinarii*, the gold being

* Speed's Hist. of Engl.

semisses and trientes, and the brass at first small parts of the as, and latterly only the half assarion. Hence quinarii form no proper appellation for this class, which may far better be called MINIMI; as including the very smallest coins of all metals and denominations. The Abbé Rothelin formed the only series ever attempted of this kind, by mingling all metals, and which afterward passed to the queen of Spain. The expense and labour of forming such a series must have been prodigious, as most of these smallest coins are very scarce*. Few of them exceed a recent English silver penny in size, and they must of course have been mostly lost, though common in ancient times. In curiosity alone this series exceeds all others; and many coins belong to it, which occur in no other size: as the eugenius in brass, the maria honorii; carus in silver; numerian in the same; and carinus, valens in gold; ateula in gold, and others. And though few can go to the expense of a series, yet specimens may easily be had and kept apart, as their curiosity claims; not mingled with the gold, silver, and small brass, as often done. But

* See Chamillard's paper, *Sur les Quinaires*, in *Mém. de Trevoux*. Avr. 1710; and also Juin. 1712.

care must be taken not to confound the denarius, which in later times is very small, but never belongs to this class, with the quinarius of the time. The former weighs 40 to 20 grains; the latter only 20 to 15, nay down to 10, and less; and is easily distinguished from the denarius, by having a very small portrait, with a pretty wide border, as the reader will see in that of Valentinian, engraven Plate II., while the denarius has a far larger portrait, and is often cut down to half the legend.

It is a striking circumstance, with regard to the Roman coins, to remark how much they are spread through all parts of the empire, even to the most remote corners. The number found in all the countries where the Roman arms penetrated is amazing. It was, no doubt, a custom with that people, in every instance ardently desirous of fame, to bury parcels of their coin, as a monument of their having, as it were, taken possession of the ground. Passing, as without certain foundation, the account of a brass medal of Augustus being found in the gold mines at Brasil, and sent by the archbishop of that province to the pope*; it is known that

* Maurinus Siculus.

Roman coins have been found in the Orkneys, where we should not otherwise have known that any Roman had been; though it is possible that some barbaric pirate brought them there from a robbery. Roman coins have likewise been found in numbers in other the most remote parts of Europe, Asia, and Africa, at that time discovered. For the quantity found in the central provinces, the want of banks for money, which obliged individuals to bury their cash for security, the burial of money with the dead, and other circumstances of the Roman polity, not necessary here to dilate, must account.

SECTION XVII.

Medals of other ancient Nations.

HAVING treated, at such length as the design will permit, of the coins of the two principal languages of antiquity, it remains to mention those of the others. This shall be done with much brevity, as such coins are not numerous, though some of them are highly valuable and important.

It may be premised, that, by ANCIENT coins, all preceding the 9th century, or age of Charlemagne, are meant; and by MODERN, all posterior to that period.

Coinage, like other arts, certainly originated in the east. But it really seems that, according to the testimony of Herodotus, we are not to go further east than Lydia for this invention, if it did not arise in Greece itself, about 800 years before our æra. Homer, who

wrote about 850, mentions scales; but says nothing of money. If we look further east, there are three or four great nations, who might be supposed capable of claiming this invention, namely the Assyrians, Medes, Phœnicians, Indians, and Chinese: for the Persians are out of the question, as their empire began not till 570 years before Christ. The Assyrians, a great nation of the same race and speech with the Arabs and Phœnicians, conquered the Scythians or oldest Persians, about 2220 years before Christ, and established the Assyrian empire; which lasted till the Medes, 920 years before our æra, seized the north of present Persia; and in Babylon and the south, till Cyrus, about 570 years before Christ, established the Persian empire on the ruins of both Median and Babylonian. But certain it is that no coins are found, which can be even imagined to belong to Assyrian, Median, or Babylonian kings; and their empire, though rich in itself, was unknown in commerce; and weight alone, as appears from Scripture, was used in estimating metals. The oldest coins found in their empire are palpably Persian, and similar to the Greek.

The Phœnicians, a people famous for ancient

civilisation, appear not to have coined money, till after the Greeks had set the example. No Phœnician coins are found of much antiquity; and not one, so far as I recollect, without both obverse and reverse: nor is there cause to think any of them older than about 400 years before our æra. From Scripture it also appears that weight alone was used in the famous cities of Tyre and Sidon; nor is there a hint in any ancient writer of coins peculiar to them, or at all used by them. In Egypt coinage was unknown: not a coin with a hieroglyphic is found; and in the mouths of the mummies there are only thin round pieces of unstamped gold, to pay Charon's fare.

India, though famous for its Bramins and early civilisation and commerce, appears not to have any claim to the early use of coinage. Voltaire tells us that Canghi, the late Chinese emperor, A. D. 1700, and the Chinese virtuosi, used to collect the ancient coins of India. If this anecdote be founded, there is room to suspect that the coins thus collected were really the ancient Greek and Roman coins, which flowed into India; and which the Chinese, who knew no further, took to be coinage of India, because handed by the Indians to them. Few


Indian or Chinese coins exist, till within a late period; and those of both countries are so rude as hardly to deserve collecting.

Upon the whole, the LYDIAN coins seem the most ancient of Asia. The wealth of the Lydian kings is famous in history and poetry. Unhappily their coins have no legends, so that conjecture only points out the ancient coins in electrum and silver, found in Asia Minor, and different from the Persian, to be Lydian.

In Dr. Hunter's cabinet there is a gold coin weighing the tetradrachm, which is extremely ancient. It has the usual rude globosity of early antiquity; and bears the indented marks of the first coinages upon one side, while the other presents a man kneeling, with a fish held out in his left hand, and a sword depending in his right. This coin is perhaps one of the very staters of Croesus, which weighed four drachmas as Josephus tells us, and struck in Lydia, a maritime country. It is of very pale gold, like electrum; which is owing to the want of art at first in refining the metal; which, as Pliny tells us, was often found mingled with a great deal of silver. When the silver was above one fifth of the gold, it was denominated *native*

electrum; and indeed sometimes more highly valued by the ancients than gold itself. In the same drawer of that cabinet, among the uncertain coins, there are near a score of other gold coins; some of them not much inferior to this in apparent antiquity. Dr. Combe, who has published them in his excellent description of Dr. Hunter's coins of cities, and whose opinion is in those matters of much weight, thinks the latter set, which are meant for one size of about 40 grains, belongs to the cities of Asia Minor. The oldest of them may have been struck there when coinage was proceeding from Lydia through Asia Minor, toward Greece. The gold is in many extremely pale; and all, even those which bear the indented mark, are of a most exquisite fabric, surpassing all description; and as much superior to that of the best Sicilian coins, as the latter are to all other coins in the world.

Next are the PERSIAN, which are well known from the archer on them; and from Mithras the Persian deity, the dress of the princes, and other marks. None of these coins can be older than 570 years before our æra, when the Persian empire began. The famous darics were issued by Darius Hystaspes, who began to reign 518

years before Christ. The joke of Agesilaus is well known, who, being forced to retire from an invasion of Persia, by the bribery used by the great king to instigate the enemies of Sparta, said that 30,000 *archers* had defeated him. These coins are extremely scarce, being mostly melted down for his own coinage, by Alexander the Great, upon his conquest of Persia, as would seem. All the real darics are gold: the silver coins with the archer are later, and never were called darics. Most of the Persian coins which have reached us are silver; and have generally a king in a chariot of two horses, with a charioteer, and sometimes another figure on foot behind, on the obverse; while the reverse presents a ship, the Persians being powerful at sea as well as by land. Some have Persian characters. One in Dr. Hunter's cabinet has a ram on one side, with a long legend; the reverse has some sacred symbol of this form , in a hollow square. This symbol also occurs in the coins of the Sassanidæ, as the reader will see in Plate I. Another has a lion; another a bull. One has a fine Mithras, the Persian name of the sun, with his usual appearance of a bird's wings springing from his middle, and a bird's tail and feet: the obverse is a king, three quarters length, of fine work. Some are of copper, very thick, with

the king in a car on one side, and the ship on reverse.

But it will be proper to say a few words on the weight, and ancient value, of the Persian coins. The darics of Persia are celebrated in all antiquity; and were gold coins, so called from Darius son of Hystaspes, who began to reign 518 years before our æra. As the first gold coins of Macedon were called *philippi*, from Philip the first king who coined gold; it may perhaps be inferred from analogy, that the first gold coinage in Persia was known under Darius. The size and weight of these darics are subject to doubt. Josephus* says they were equal to the tetradrachm in weight, and worth 50 Greek drachmæ. But we have many authors†, one of them Xenophon, particu-

* So Arbuthnot quotes him, but I suspect he misunderstood his author.

† Xenophon, *Αναβ.* lib. i. calls the *δαρεικούς τριχιλίους* 3000 darics, which Cyrus promised to Silanus, a little after *δεκα ταλента*: if so, by easy progress the daric equals 20 Attic drachms. Arrian, *Περι Αλεξ.* αν. lib. iv. has a passage to the same purpose. Harpocratio says, *Εισι μὲν χρυσοὶ ἑκατέρησιν ὁ δαρεικὸς ἡδυνάτο δ' ὅς ἐστιν εἰς ταῦτο ὅπερ καὶ ὁ χρυσοῦς παρὰ τοῖς*

larly respectable, who informs us they were didrachms, and worth 20 Attic silver drachmas.

The darics are described by ancient writers as having the figure of an archer. There is one of these darics in lord Pembroke's cabinet, and weighs 129 grains, which shows them to have been didrachms on the Eubæic or Attic standard. The reader will see from the print of it, Plate I., that it has the globosity, and indented mark, of early coinage; perhaps longer retained in the east, than in Greece. It is likely that the late bishop of Bagdat, who resides in their native country, and had, as Mr. Ives tells us in his *Voyage to the East Indies*, a large collection of Persian coins in all metals, may have had some in his possession. There is one piece, but of silver, in Dr. Hunter's cabinet, evidently Persian, which has a king on horseback on one side, and an archer kneeling, in act to shoot,

Αττικοίς ονομαζόμενος: and after, λέγουσι δὲ τινες δυνασθαι τὸν δαρεῖκον ἀργύρας δραχμᾶς ΕΙΚΟΣΙ ὡς τοὺς πέντε δαρεῖκους δυνασθαι μίαν ἀργύριον. Hero mentions that the talent of Homer was the daric, or two Attic drachmas, adding, "or 5 grammata;" the gramma was the scruple, 3 to the drachma. See also Gronovius de Pecunia vetere, lib. III. c. 7.

on the reverse. It weighs 168 grains; and if the Babylonian talent, which seems to have been the standard of the Persian silver*, was 80 Attic minæ, this would have been the didrachm of that talent.

But as gold was not the primitive coinage of Greece or Rome, so it is probable that silver preceded it in Persia; and we have silver coins of Persia which bear every mark of remote antiquity. The most ancient, which are very rude, and have a shapeless hollow on the reverse, with an archer on the obverse, but with his bow in one hand and arrow in the other, not shooting as in that above described, weigh about 82 grains. Others, with a king's head on one side, and a ship on reverse, weigh about the first-mentioned, or 164 grains; some weigh 53 grains, and others about 26. A fine one, with a king three quarters length on one side, and Mithras on reverse, with his usual symbols of a bird's feet and tail, and the wings at his waist, weigh 160½ grains; but is much worn on the sides, and must at first have reached

* If we except the talents of Athens and Aegina, the others are very dubious.

the first, or 168 grains. There are four or five others, with a king in a chariot, a charioteer, and attendant on one side; a ship on the other, of great size, not less than 432 grains, being more than seven Attic drachmas. I refer to those in the vast collection of the late Dr. Hunter, to which indeed I have been indebted for most of my references to coins. The above Persian coins in particular add much to the riches of that wonderful cabinet, as hardly one of them is known to any other collection in Europe.

Of Persian coins there is a second series, that of the Sassanidæ, beginning about A. D. 223, when Artaxerxes overturned the Parthian monarchy. The Parthian coins have all Greek legends, as before mentioned: but these latter Persian bear only Persian characters. They are large, and thin; with the king's bust on one side, and the altar of Mithras on the other, generally with a human figure on each side, as the reader will see in the fine specimen, Plate I. The Persian letters are the only ones of antiquity which have not been explained, though so many specimens remain. The oldest inscriptions at Persepolis somewhat resemble those called

Helsing Runes, by Scandinavian antiquaries*. Palmyrene or Syriac inscriptions also occur there. But the letters on Persian coins are peculiar, and no attempt has yet been made to explain them. They seem to partake of the ancient Greek, Gothic, and Alanic†. The later Persian coins extend to the year 636, when Persia was conquered by the Arabian caliphs.

The HEBREW shekels, which are of silver, and originally didrachms, but, after the Maccabees‡, about the value of the Greek tetradrachm; and brass coins, with Samaritan characters, would have been put before, were not most of them later than the Christian æra, and generally the fabrication of modern Jews. At any rate, the same impression of a sprig on one side, and a vase upon the other, runs through

* These runes are explained in a *Dissertatio de Runis*, among other tracts on Swedish antiquities in the king's library, Buckingham-House.

† See the Plate XIV. of Eccard's *Origines Germanicæ*, Goettingen, 1750, 4to.

‡ Gronovius, de Pec. Vet. lib. iii. c. 7, from Josephus.

all the coins of that barbarous nation; and the admission of but one of them is rightly esteemed to be almost a disgrace to a cabinet.

The PHŒNICIAN and PUNIC coins claim our next consideration. The former are of Phœnicia, and the latter of Carthage; but Punic characters also occur on Spanish and Sicilian coins of cities, on those of the Elder Juba king of Mauretania, and others. The alphabets, which are nearly allied, have been cleared to certainty, by relation with the Syriac, Chaldaic, and Hebrew. And the ancient civilisation and great power of the Phœnicians and Carthaginians, renders their coins very interesting. The PALMYRENE coins and inscriptions have admitted the same illustration; Palmyra being a Syrian kingdom, which gradually acquired importance, from its situation between the kingdom of Syria Proper, under the successors of Alexander, and that of Parthia. It seems to have been founded about a century before Christ; and was destroyed by Aurelian near three centuries after the Christian æra. The author of the Ruins of Palmyra oddly thinks it founded by Solomon, as the tradition of the Arabs runs; not knowing that the Arabs give all

great works to Solomon, who in their creed was king of magicians*.

The ETRUSCAN coins are inscribed with the Etruscan character, which has been perfectly explained from its connexion with the Pelasgic, or oldest Greek and Latin.

The SPANISH are inscribed with two or three different alphabets allied to the old Greek, or to the Punic; but complete satisfaction has not yet been given in the explanation†.

Such are the chief, if not the only, coins of antiquity which occur with unknown legends and barbaric characters. But there are a few medals with Roman legends which fall into this Section; for it must be observed, that, though all coins with Greek legends are indiscriminately termed Grecian, many with Roman characters, by no means rank with the Roman.

* Niebuhr, Voyage de l'Arabie.

† Velasquez has published the best book on the subject, Madrid, 1752, 4to. See also the small but curious work of Stefano de Terreros, intituled *Paleografia Spagnuola*, Madrid, 1758.

This is owing to the Roman character having, since the days of Rome, spread all over Europe, and continued in universal and constant use with most nations; so that the absurdity which would spring from classing even the ancient coins of other kingdoms as Roman, because their legends are in Roman characters, is apparent, and must start to every eye.

Spain and Gaul being in the south of Europe, as well as Greece and Italy, it is no wonder that they far preceded Germany, and Britain, in all the arts of cultivation. The ancient coins of SPAIN are numerous; and palpably not all struck by the Punic colonies, for the legends are in different characters*. The ancient coins of GAUL are also numerous, and many of them in base gold; but unhappily the most ancient have no legends at all. Marseilles, a Greek colony, introduced Grecian letters and arts into Gaul, by penetrating the most distant parts of the country for articles of trade, in order to export them. Her fleets even visited Britain and Germany, as we may judge from the voyage of

* See Museo de las medallas desconocidas Espanolas, par Don V. J. Delastonosa. Huesca, 1645, 4to; and the above work of Velasquez.

Pytheas. In return for European products she brought eastern gold, which abounded in Gaul, as we may judge from the quantity Cæsar carried from his Gallic conquest. After this event several free states and princes existed in Gaul, as friends of the Romans; and struck numerous coins with Latin legends*. But these legends are not of easy interpretation, as *VODISIO—CISIAMBOS. CATTOS VERCORRETO—SOS PUBLICOS*, and the like. Some British antiquaries contest the claim to such coins; but it must be evident to any impartial judge, who considers the state of the two countries at the time, that Britain cannot claim a sixth part of these undetermined coins; that is, in other words, the chance in favour of Gaul is as six to one. But a complete work on the Gallic and British coins is much wanted.

Let us now say a few words on the ancient BRITISH coins. When Cæsar entered Britain, he says of the natives, *utuntur tamen ere, et nummo aureo, aut anulis ferreis ad certum pondus examinatis, pro nummis*: “they make use of
“ brass instead of golden coin, or iron rings re-
“ duced to a certain weight, instead of [our

* Many Gallic coins are published by Bouteroue.

brass] coins." So the passage stands in the first edition, Rome, 1469, folio; but it has been miserably mangled in later editions, especially those of Joseph Scaliger, a critic, whose publications cannot be too severely condemned, as he impudently foisted every dream of his own into the text of ancient authors, by way of correction. Cæsar's meaning clearly is, that our ancestors used brass, apparently coined, as a superior metal, in like manner as more advanced nations used gold. And that *pro nummis*, instead of the brass coinage of Rome (*nummus* being a peculiar name of the brass sestertius), they used iron rings, examined and reduced to a stated weight. Rude coins of copper, much mingled with tin, are frequently found in England; and may perhaps be the copper coins used by our ancestors; for Cæsar's expression surely infers that their copper was in the form of coins. These pieces are of the size of a didrachm, the common form of the *nummus aureus* among the ancients.

Though Julius made no progress in Britain, and Claudius a century after really began the conquest of the island, yet as all Gaul was effectually under Roman power, the Britons began to admit Roman arts. The idea we are to form

of Britain, from the time of Cæsar to that of Claudius, is, that it was unconquered by the Romans, but sufficiently sensible of the Roman power and superior civilisation. Augustus was proceeding against it, when stopped by ambassadors, who offered such terms as he accepted. Julius had engaged to maintain the Trinobantes, of Middlesex and Essex, against Cassivelaunus, his chief foe in this island, and who was king of the Cassii of Buckinghamshire, &c. Cunobelin, of whom we perhaps have so many coins, was king of the Trinobantes, and educated, as is said, in the court of Augustus. He is mentioned by Suetonius and Dio. As to any supreme king in Britain at that time, it is a mere fable, and only fit for Geoffrey of Monmouth.

Those coins of Cunobelin are the only ones probably * British. Most of them yet found

* Only probably; for the portraits, sizes, and seeming age of these coins vary so much, that some incline to think the name is that of some Gallic deity, or hero—not of our Cunobelin. The CAMV and VER may be names of places, or persons, in Gaul. As for the TASCIA, it is common upon coins certainly Gallic; but its interpretation is dubious. In old German, *tasg* is a purse. The figure thought to be the mock moneyer *Tascio*, is Vulcan making a helmet.

have CVNO upon one side, with an ear of wheat, a horse, a kind of head of Janus, or some such symbol; and often CAMV, thought the initials of Camudolanum, upon the other side, with a boar and tree, or variety of other badges. They have likewise frequently the word TASCIA upon them, not hitherto explained, though absurdly supposed the name of the moneyer*. They are mostly found in copper; but some in gold, silver, and electrum, or a mixture of the two last. One or two have VER on the reverse, thought to mean Verulamium; and other legends and inscriptions. The British Museum has a very fine collection, formerly the property of sir Robert Cotton.

The reader will perceive that all the kings of France down to Charlemagne range in this division. Liuva I., and the other kings of the West Goths in Spain, likewise appear upon their coins encircled with Roman characters. Liuva I. began his reign in the 567th year of

* The putting the name of the moneyer on coins was a late practice, unknown till the 6th century. It came in gradually, a century after the Roman mints had ceased in Europe, with the empire; and when private persons contracted with the kings for the little mints, and put their names to identify their mintage.

our æra; so that a considerable space of the Spanish monarchy falls into the period assigned to the coins treated of in this section. On these coins I. DI. NMN. means *In Dei Nomine*.

Different other Gothic kings, who reigned in Italy and other countries, after the fall of the Roman empire in the west, likewise use the Roman language in their coinage. They most commonly occur on the size of medals termed small brass; and in this way we meet with Athalaric, Theodahat, Witigez, Totila, Baduela, and Theias. Atcula likewise appears, whom many medallists take to be the famous Atila; but, as others doubt of it, and ascribe these coins to a Gothic prince of the name of Atcula, the point remains dubious. They are in gold, silver, and brass, and have only a head of Victory, reverse a horse with VLATOS.

Many coins also occur with legends, which, though meant for Latin characters, and in imitation of Latin coins, are so perverted as to be illegible. Such are in general termed barbarous medals.

EXPLANATION
OF THE
PLATES
IN THE
FIRST VOLUME.

The Fignette in the title-page is a reverse of Commodus, in first brass; and also occurs in silver. The Apollo Monetæ was the deity of art and elegant design, in coinage.—From Dr. Hunter's cabinet.

PLATE I.

GREEK AND PERSIAN.

- Nº 1. *A daric, from Lord Pembroke's collection.*
2. *Silver Persian coin, from Dr. Hunter's. Unpublished.*
3. 4. *Drachmas of Ægina, from the same.*
5. *Silver hemidrachm of Alexander the Great, supposed to be the only coin struck in his life-time, with his portrait. The youth of the face; and horseman, a common reverse on Macedonian coins; indicate this to have been struck in Macedon, when Alexander first came to the throne; and before he gave orders to discontinue his father's practice, of giving his own portrait on his coins. Unique in Dr. Hunter's cabinet, and unpublished.*

- N^o 6. *Obverse of the Macedonian brass, under the Roman empire, being the head of Alexander. From the same.*
7. *Tigranes the Younger, king of Armenia, reverse his sister, son and daughter of the famous Tigranes. The lady's name is lost by the coin's being worn, and is not preserved by historians. (See Plutarch in Lucullus and in Pompey, and the *Historia Julia* of Reinneccius.) Unique in Dr. Hunter's cabinet, and unpublished.*
8. 9. *Specimens of the coins of the Artucida. From the same.*
10. *Silver of the Sassanida. A remarkable coin, with three portraits of the king, queen, and prince; brought by Mr. Crofts from the east, and now in Dr. Hunter's collection. Unpublished.*

PLATE II.

ROMAN.

- N^o 1. *The gold pièce marked LX. (See Sect. vii.) From Dr. Hunter's.*
2. *Denarius of Gneius Pompey the son, reverse Spain receiving him. Unique in Dr. Hunter's cabinet, and unpublished.*
3. *Julius Caesar, third brass.*
4. *Antony, reverse his wife Octavia; an aureus, formerly Cardinal Quirini's, afterwards Mr. Walpole's. The same is known in large brass, but in gold it is believed unique and unpublished.*
5. 6. *Silver and brass of Cunobelin, from Dr. Hunter's.*
7. *Otho in brass, struck at Antioch, from the same.*

- N^o 8. *Pescennius Niger* in brass, struck at *Smyrna*, from the same. Unique and unpublished.
9. *Quinarius* of the lower empire. From the same.
10. *Maria Honorii*. Unique and unpublished, in the author's possession. MARIA AV.
11. *Silver Carausius*, from Dr. Hunter's.
12. *Timelaus son of Zenobia*. Unique and unpublished, from the same.
13. 14. *Medallets* from the *Numismata Selecta* of Seguinus, and Baudelot's *Utilité des Voyages*.

PLATE III.

THE BRITANNIAS ON ROMAN COINS.

These coins are so scarce, that none except No. 6. is in Dr. Hunter's cabinet; but the books they are taken from are of the best credit.

- N^o 1. *Reverse of Claudius*, in first brass, from Havercamp's description of the cabinet of Christina queen of Sweden. The same occurs in gold of Claudius, BRITANNIA. *Figura muliebris stans, dextra remonem, ad pedes prora navis*. Num. Arscot. Tab. XIX. n. 1. Occo.
2. 3. *Reverses of Hadrian* in first brass. The first from Beger. *Thes. Brandenb. Regis Prussiae*, and from Gessner. The second from Vaillant. Occo mentions another of Hadrian, her left hand on a prow, her right holding down a sceptre.
4. 5. 6. *Reverses of Antoninus Pius*, the middle one large brass, the two others second brass. The large is from *Pedrusi Mus. Farnes*. N^o 4. from Addison.

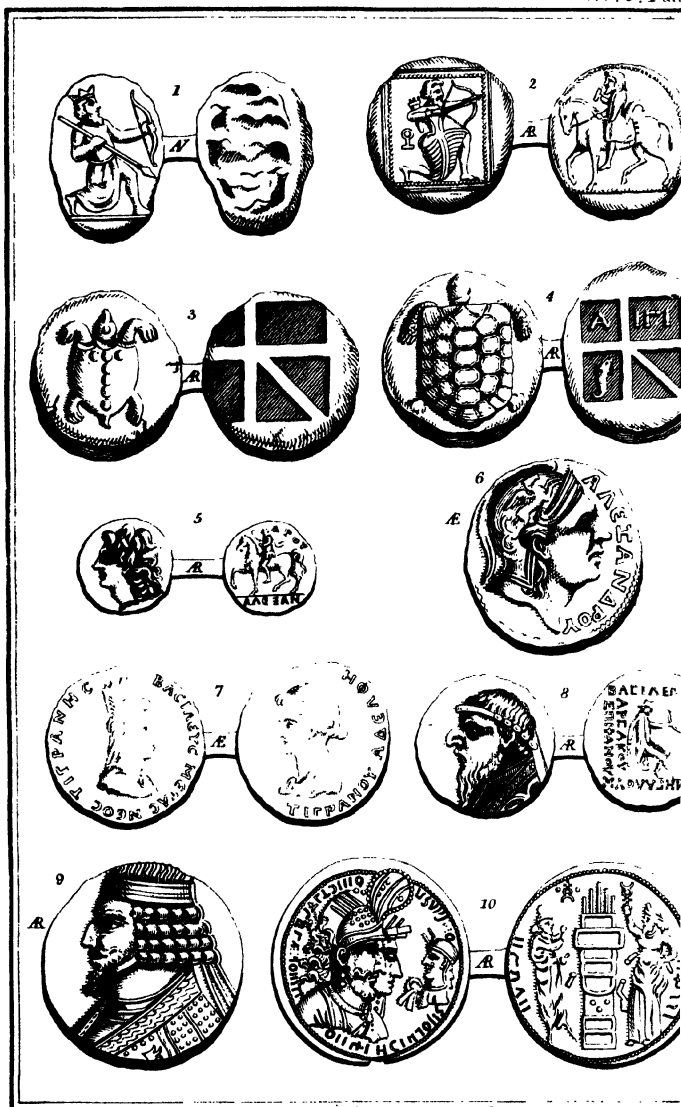
376 EXPLANATION OF THE PLATES.

N^o 6. from the author's casket. This last is the only Britannia that is not uncommon.

N^o 7. 9. 10. *Reverses of Commodus, from Vaillant.* N^o 7. is rather a *Victoria Britannica*, though only having
BRIT.

2. *Reverse of Severus, in first brass, from Occo and Gessner.* Occo mentions another of this emperor sitting on martial spoils.

END OF THE FIRST VOLUME.



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